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U. S. DEPARTMENT OF AGRICULTURE.

OFFICE OF EXPERIMENT STATIONS—BULLETIN 199.

A. C. TRUE, Director.

PROCEEDINGS

OF THE

TWELFTH ANNUAL MEETING

OF THE

AMERICAN ASSOCIATION OF FARMERS' INSTITUTE WORKERS,

HELD AT

WASHINGTON, D. C., OCTOBER 23-24, 1907.

EDITED BY

W. H. BEAL,

For the Office of Experiment Stations,

AND

JOHN HAMILTON,

For the Association.

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1908.

THE OFFICE OF EXPERIMENT STATIONS.

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[Bull. 199]

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LETTER OF TRANSMITTAL.

U. S. DEPARTMENT OF AGRICULTURE,
OFFICE OF EXPERIMENT STATIONS,
Washington, D. C., December 31, 1907.

SIR: I have the honor to transmit herewith, and to recommend for publication as Bulletin 199 of this Office, a report of the proceedings of the twelfth annual meeting of the American Association of Farmers' Institute Workers, held at Washington, D. C., October 23 and 24, 1907.

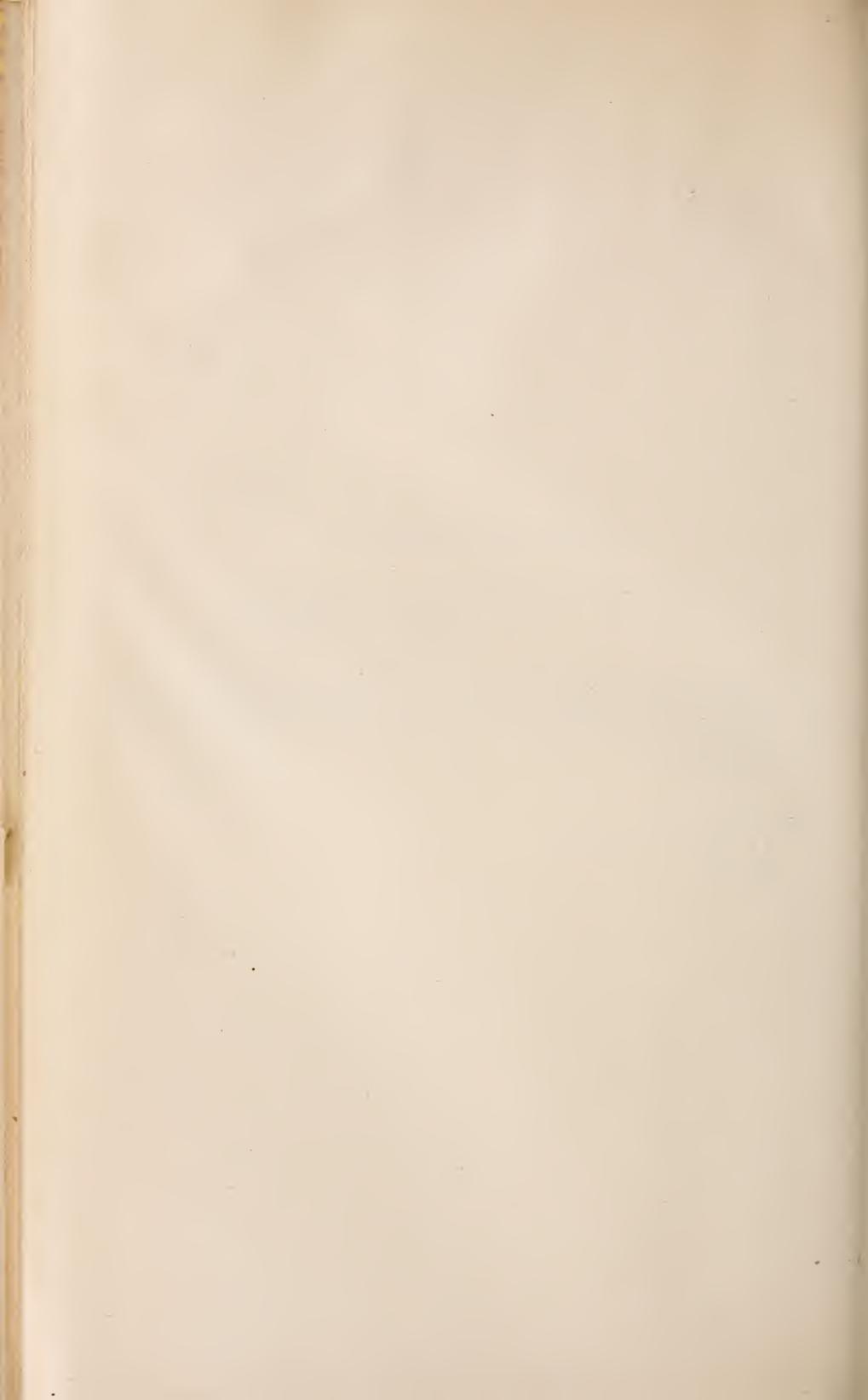
Respectfully,

A. C. TRUE,
Director.

Hon. JAMES WILSON,
Secretary of Agriculture.

[Bull. 199]

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	Term expires.
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G. C. Creelman, Guelph, Ontario, chairman.....	1908
K. L. Butterfield, Amherst, Mass.....	1909
George McKerrow.....	1910

Movable Schools of Agriculture.

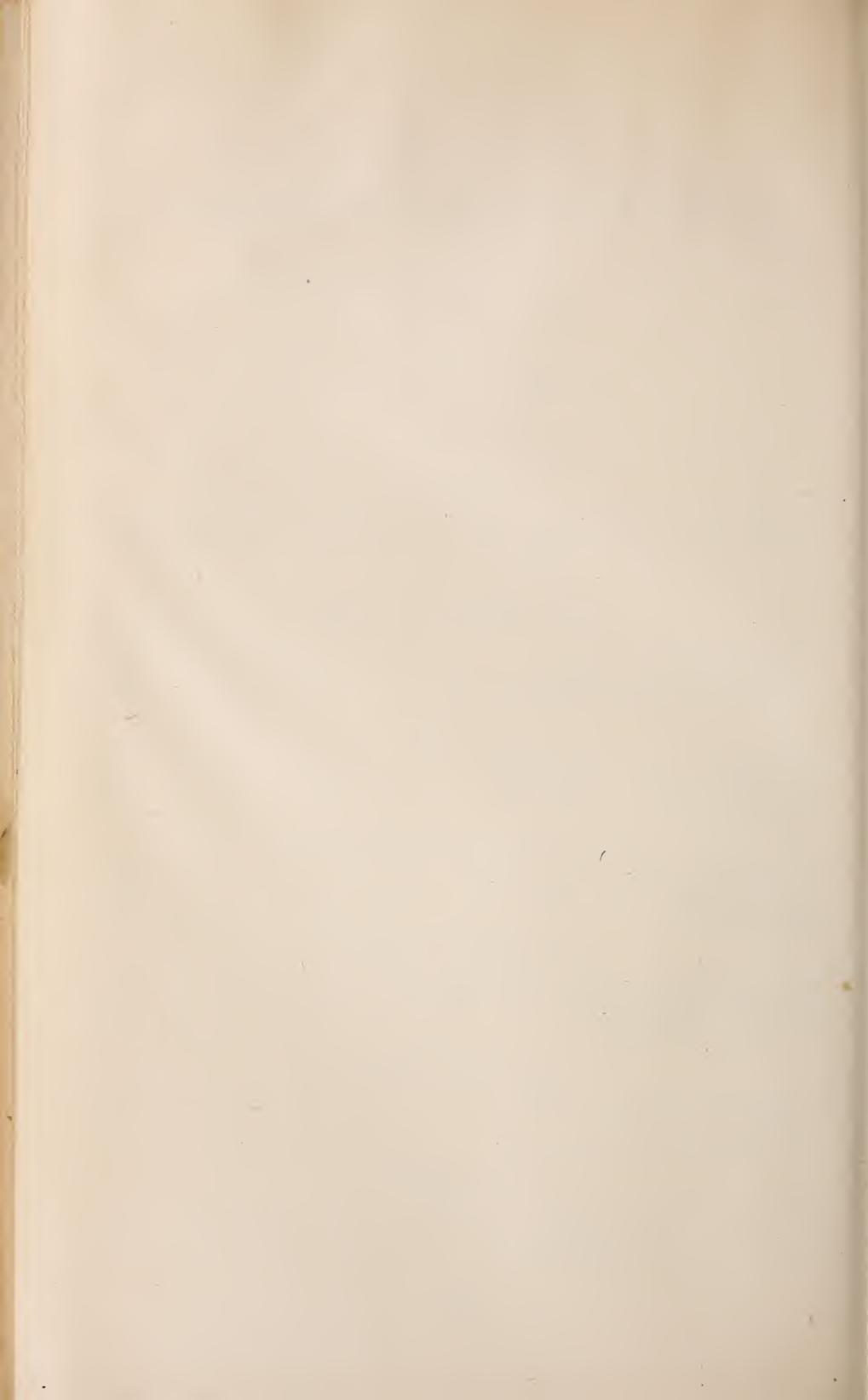
L. R. Taft, Agricultural College, Mich., chairman.....	1908
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Women's Institutes.

Mrs. Adda F. Howie, Elmwood, Wis., chairman.....	1908
Dr. A. Backus, Aylmer, Ontario.....	1909
Mrs. F. L. Stevens, Raleigh, N. C.....	1910



PROCEEDINGS OF THE TWELFTH ANNUAL MEETING OF THE AMERICAN ASSOCIATION OF FARMERS' INSTITUTE WORKERS.

MORNING SESSION, WEDNESDAY, OCTOBER 23, 1907.

The association was called to order at 10 o'clock a. m. in the parlors of the National Hotel, the president of the association, E. A. Burnett, of Nebraska, in the chair.

There were present 130 delegates and visitors, representing 26 States and Territories and 4 Provinces.

The Assistant Secretary of Agriculture, Hon. W. M. Hays, representing the U. S. Department of Agriculture, delivered the following address of welcome:

ADDRESS OF THE ASSISTANT SECRETARY OF AGRICULTURE.

After greeting the association on the part of the Department of Agriculture, the Assistant Secretary proceeded to discuss the subject of financing country life education as follows:

During the last quarter of a century this country has spent twenty-five million dollars in agricultural research, and other countries a similar amount. In the next twenty-five years two hundred and fifty millions will be spent in this country, and more than a like amount in other countries. The knowledge which arises from this research work is coming to have its effect, and even the little rural school is beginning to change its complexion, to change its point of view, to become more practical. The country is coming to believe more in country life, and the schools are seeing the wisdom of doing something to keep the country people from forsaking their own business and their ancestral homes for the city. The little rural school is taking up with some success the subjects of farming and farm home making, but that school is not adequate. A much better system is developing in a most encouraging and even surprising way. I speak of the consolidated farm school.

There are probably well established upward of 300,000 one-room rural schools in this country. About two-thirds of these could be converted into something like 30,000 consolidated farm schools, and leave remaining in the more isolated districts 100,000 or more of the little rural schools.

The great problem in country life education is the consolidation of these rural schools and financing the increased expense resulting therefrom. This is not impossible; it is not impracticable; and the American people are going to do it. Already approximately 600 of such schools are in operation. The Department of Agriculture for two years has had a man traveling among these schools, and the knowledge gained is one of the most inspiring things ever brought out in connection with country life education. The evidence is clear that the consolidated farm school is with us to multiply and be a permanent and most beneficent institution. There are only a few of these 600 consolidated rural schools in which the industrial work is yet adequately organized, but they are showing us how this work can be established. The cost of these schools is quite large, but the expenditure will so increase the economic efficiency of American farm communities that it will be more than justified by the better living and better rural social and general conditions as well as by the larger output of farm products. There is no question in my mind that the American people will find some way to finance these schools.

The added expense in these schools is largely in hauling the children and in putting industrial work into the schools. It depends considerably on local conditions. One of these schools is the educational center of a district covering twenty to forty square miles. In regions of muddy roads or very cold winters smaller sizes may be necessary. In the Southern States the districts can be extended, as there the children can walk

to the wagons, and require only as many of these as will comfortably haul them. In the far north the problem is more difficult, as the children can not wait in the cold for the wagons, although statistics show that even on these routes the wagon is generally within a few minutes of being on time. Only rarely is it as much as ten minutes late. Some of the schools most nearly developed on the plan that we might say is the ideal one have usually 10 acres of land, 5 acres devoted to a combined farmstead and campus, with playgrounds, forestry, horticulture and general garden plats, and with a four or five room school building, the other 5 acres being devoted to demonstrations and often experiments in field crops. The cultural work is to be done by the pupils under the superintendence of the principal. It is believed that the principal should have a cottage on this little farm and bring up his family there. The principal should be one trained to teach agriculture, and he should have an assistant trained to teach home economics.

A remarkable feature which is developing in this system of education is that it provides for an effective combination of apprenticeship and school work for the country boy and the country girl. It is suggested that the scheme be worked out according to a general plan under which the older pupils are in school six months and in the vocational work of the farm and the farm home the alternate six months. It is believed that the school should provide a ten-year course, with only two high school years instead of four, as many of the schools now have in Ohio and Indiana and elsewhere, putting more stress on the more costly industrial subjects, with a view that the country boy and girl shall go away from home for the last two high school years to some other school. If they desire to remain in agriculture, either in practical farming and farm home making, or in some line of technical agriculture, let them go to an agricultural secondary school; if they desire to go into some other than an agricultural pursuit let them go to some city high school, or some other secondary school which will prepare them for that work, or will prepare them for a college course in the desired line.

In Minnesota, and I believe in Nebraska, agricultural high schools have demonstrated the peculiar advantage of having the farm boys and girls in school only six months in the year. This leaves them in vital connection with the home farm during the entire field season. Those of us who have observed this plan in operation at agricultural high schools believe that it is more educational for the boy or the girl who is to remain in country life than to be in school nine months, with only an indifferent connection with the farm business for three months. This apprenticeship relation or work can be carried out during the six months when the pupils are in school by the parents and teachers cooperating in directing the chores and other practical work mornings, evenings, and Saturdays. During the six months in which the older pupils of the farm school or the agricultural high school remain at home engaged in the farm work the teacher of agriculture and the teacher of home economics can each spend two days each week with the school buggy going about and assisting the parents in making educational the apprenticeship work of the farm and of the farm home.

It is further suggested that during the six alternate months the reports of this apprenticeship work be made on one day each week, that the older children come to school on this day, and that during this time they do most of the work of cultivating the little school farm, in getting practice in doing things well that they learn from their parents to do perhaps not quite so well, in doing many things that their parents do not teach them to do, in learning of many things that are not found on the home farm, and in having in part a holiday for visiting and personal enjoyment. During this day they could have school organization work, such as societies and games, and games between two schools, building up a school spirit. These games and contests would cultivate the larger social unit in the country—the unit of farm school district size. Country youth would thus be better able to learn how to deal with people, how to do team work, how to develop cooperative organizations, how to organize social enterprises, and how to enjoy each other.

The Davis bill introduced in Congress, which seems to be making remarkable progress, will provide an agricultural high school for every 100 to 200 of these consolidated farm schools, or on an average one in every ten counties, or 300 for the entire country. The bill as it now reads would provide a school for each district of not less than ten counties. There is a movement generally favored to change the bill so as to read that the agricultural high school districts shall be not less than five nor more than fifteen counties. This seems to be especially desired by Eastern States, where there is a very large proportion of the people engaged in nonagricultural pursuits. If this general scheme were carried out, and we had also 30,000 consolidated farm schools, the stress of work in the agricultural high school would be mostly on the third and fourth high school years, taking the graduates from the two high school

years in the farm school. But, as in Minnesota and Nebraska, at present there would be need of the first and second high school years also in the agricultural high school, to accommodate the students from the little rural schools remaining in those districts too sparsely settled for consolidation.

These agricultural high schools would articulate in the first place with the farm. That they would send most of their students back to the farm the schools already organized, as in Minnesota and Nebraska, have amply proven. They would in the next place articulate with normal and other schools which further prepare their graduates for teaching in rural schools, and especially for teaching in the consolidated farm schools; in fact they would articulate with general secondary and higher schools far better than do our present rural schools. They pay especial attention to giving teachers the industrial technique needed to prepare them for the small schools. They would also articulate with the agricultural college, giving to those institutions students splendidly equipped for collegiate work in agriculture and home economics. Probably the most important of these functions is the second, because the larger part of the country life problem lies in the consolidated farm school, and the preparation of teachers for those schools is to be even a more important function than the preparation of young men and young women graduates of these schools who will go back and be leaders in each rural community.

Large numbers of graduates of agricultural high schools in every county in the country would organize and see to it that the consolidated farm school is financed, officered, and made successful. This is a function that could be done by the graduates of large agricultural high schools far more effectively than by the students of small agricultural high schools, as those developed by a single county, or by students from partial agricultural courses in city high schools, or partial courses in other schools not devoted primarily and in a large way to country life subjects. The unit of size in the county high school is only a little larger than the unit area of the consolidated farm school. The faculty and equipment is only a little larger than that available in a consolidated farm school. In fact the farm school has at its door the 100 to 200 farms and homes where the pupils live. All that is needed to give to these value as technical equipment for the farm school is to develop the pedagogic possibility of the combined school and apprenticeship facilities at hand under the farm school plan.

These large agricultural high schools, each accommodating ten counties, would have farms of 240 to 640 acres, splendid school buildings, and fine equipment for instruction in agriculture and home economics; strong faculties in both of these lines; branch experiment stations, and students' organizations. They would have connection with such college extension work as the people of the respective districts are particularly interested in.

With a scheme like this carried out our agricultural colleges pass from their heretofore unsatisfactory relation to the other colleges or to the university or to the State college into most splendid relations with the other collegiate departments. It has been wisely suggested that in every State or in almost every State one of these agricultural high schools should be located in connection with or beside the State college, whether it be a separate college or a part of the State university; and that near by there be also one or more consolidated farm schools such as the one beside the college at Guelph, Ontario, though less extensive and more typical.

This plan will give those who are preparing to teach in these lower schools a chance to observe the work all along the line, from the more primary instruction and apprenticeship instruction of the consolidated farm school district up through the agricultural high school and the college course. It will change the attitude of the faculty of the college, as has occurred in the University of Minnesota and I dare say in the University of Nebraska, to have in large classes in secondary school work boys and girls nearly all of whom expect to return to the farm. It will change the point of view of the members of the faculty and show them that their main problem is the preparation of young people who go back to the farm and young people who become teachers in the consolidated farm school for their duties; and that the preparation of men and women for teachers and research workers is the lesser though very important problem. These faculties, both in the agricultural high school and in the agricultural college courses, will keep creating new work in their college courses; and much of the more practical part of this education will early be transferred down to the high school course to be given to the boys and girls who are going back to the farm, making the educational scheme extremely progressive. New work created for college classes will keep the upper class work up to date and most interesting.

REPLY TO ADDRESS OF ASSISTANT SECRETARY OF AGRICULTURE.

G. C. Creelman, of Ontario, replied to the address of Mr. Hays as follows:

The agricultural colleges and experiment stations are doing much more for the people than they were able to do some years ago. When the Hatch Act was passed in 1887, bringing into existence about two score of State experiment stations at one time, it was not to be expected that capable men could be found in a day who would be able to occupy all of the positions in scientific agriculture that were created at that time. If you are interested in the romance of agriculture, you have only to look over the files of experiment station bulletins of the first few years of their existence to be highly entertained.

But the agricultural colleges gradually attracted students who, on graduating, were able to take up experiment station work of such nature that at the present time every up-to-date farmer of every State of the Union and every Province of the Dominion looks, and not in vain, to the station and college for real help in time of need.

Let me mention a few items of interest in this direction. In a Western State there are over 2,000 varieties of wheat being tested at a single station. North Dakota claims that its station is worth a hundred millions of dollars a year to the State itself. An increase of two and a half millions of dollars a year is now being made by the Ontario farmers from the production of a variety of barley introduced by the experiment station from Manchuria some eighteen years ago. If the State of Wisconsin had done nothing else but produce Professor Babcock, and through him his milk tester, it would for that reason alone be entitled to its present prominent place in the Union.

The value of the work of disseminating accurate information respecting the growth of the cowpea in the South can hardly be estimated. The introduction and spread of alfalfa in the West, the improvement of poultry in the North and East, the introduction and distribution of new grains in the Northwest, the improvement of corn in the Mississippi Valley through the application of scientific methods, and the obtaining and distributing of accurate information by the colleges and stations have done more to increase the production of the average acre of land during the last ten years than all other agencies combined up to that time.

It is therefore with peculiar pleasure that we have listened to the Assistant Secretary to-day, for we feel, with the splendid cooperation that is now existing between the heads of governments, the leaders of State workers, and the workers themselves in the colleges, stations, and farmers' institute work, that greater things, through this cooperation, will be accomplished for the agriculturist within the next few years.

And now may I refer for a moment to the more immediate work of this Association? Replying to an address of welcome, I realize that it is not my duty, nor is it my inclination, even to make suggestions as to the future policy of the farmers' institute movement. I do take the liberty, however, of congratulating ourselves upon the fact that so much reliable information is now being furnished to us by the colleges and stations. This does away with the necessity for employing men for institute work who have had only such experience as a man can get on his own farm. Of course the day is long since past when we employ men as lecturers simply because they have a good presence and can deliver an entertaining address. The farmers of Ontario, at least, are demanding an entirely different style of institute from what they were satisfied with a few years ago. They are not now looking so much for something new as for further information about better methods of handling their present kinds of crops, implements, live stock, and other farm property. They are calling for agricultural college graduates to take the lead in this movement; and as farm conditions improve and more attention is paid to the sanitation of the home, the improvement of the home grounds, the drainage of the land, the improvement of the live stock, and better methods of communication with the neighbors and the neighboring towns, our college-bred men in larger and larger numbers are, in my opinion, going to return to the farms. When this occurs the supply of farmers' institute workers of the sort demanded will be available in increasingly large numbers.

The pioneer work has therefore been done, and it seems to me it is our duty to make our farmers' institutes and farmers' clubs from this time on a center of agricultural instruction and culture permanently located in our farming communities.

For the Canadians I thank you, Mr. Secretary, for your kindly welcome of this invasion of your country at this time, and, on behalf of your own good folk of the United States, I thank you also for giving us the freedom of this beautiful capital city, and in particular of the most important Department, which you have the honor to represent.

The annual address was then presented by E. A. Burnett, president of the association, as follows:

PRESIDENT'S ADDRESS.

It has been a pleasure for me to attend the farmers' institute meetings for a number of times and to feel that the organization of this movement is taking shape in such a way that it must make a permanent impress upon the agriculture of the country. In the few words I have to say this morning to this association I have thought it best to confine myself almost wholly to some of the things which seem to me important in connection with the organization of the institutes in the newer institute fields and as applying to my own State, and I hope that may apply in some large measure to those States which have had considerable experience and have made considerable progress in the institute work.

This movement is finding its response among the people in the fact that education upon the farm, as elsewhere, is more and more necessary if the farmer is to keep abreast with the progress of this generation and if the rural community is to furnish the incentive for progress in country life. Agricultural progress demands not alone that a few men in a county or a township shall be successful farmers, but that every man and woman who lives out on the land shall be efficient and successful in his particular vocation. The farmers' institute endeavors to create a taste for improvement among all classes of farmers in every agricultural community and to furnish the information making possible this movement.

Statistics just at hand from the secretary, Mr. Hamilton, show that approximately 1,500,000 people have been in attendance at the farmers' institute sessions during the past fiscal year and that more than a quarter of a million dollars have been expended in institute work; that there have been more than 11,000 farmers' institute sessions in the several States of the Union. The institute in many States has attained a high degree of efficiency; in other States it has carried on only the most primary forms of instruction. It has sent out as speakers a class of practical and successful farmers to demonstrate the possibility of introducing new and more profitable methods, the speaker using as a basis for improvement his own experience and success under conditions similar to those of his audience. In many instances these men have been able to present a discussion of the fundamental principles involved in the line of improvement they advocate. In other instances, possibly, they have been able only to tell how they have succeeded on one particular farm, but thereby have aroused in the audience a desire to extend this improvement to other farms in the locality. The success of many of these older institute workers has been due to their impressive method of presenting the subject and to their ability to create a desire for better things. Following closely upon this method has been that of practical demonstrations in some particular branch of farm industry—the manufacture of butter on the institute platform, the judging of seed corn, or of horses or swine, agricultural displays of one sort or another brought together for the purpose of comparison and contest. These demonstrations are usually soon outgrown, except under conditions which may specially favor them, such as the corn-judging demonstration at a special corn institute or school.

I am not sure now to what extent experience may bear out that statement. I might say that in Nebraska we are just introducing some of these things which I state here are soon outgrown. I do not know that they will soon be outgrown in Nebraska, but I see some difficulties in the way which make it seem to me that the institute must be adapted to special things in order that these special lines may be carried out. When the institute is so adapted it is possible that we may be able to have the very best form of farmers' institute.

In my judgment the institute movement will always use lecturers upon practical farm topics having a direct relation to the profits of the farm. I make that statement because there has always been a tendency, and possibly wisely, to say that the institute must deal wholly with principles, and that it must not place too much importance upon the financial end of the improvement which is to come through the farmers' institute. Though this may not be its only important work, the farmers' institute movement must never get away from the common man, on the small farm, with a limited capital and without special advantages of education. When it does it has deserted the one who needs help in agricultural lines more than any other. It must reach out and help him by showing how he can improve his financial condition through the use of methods which have been developed by successful farmers and by the work of the experiment stations. To this man the question of profits especially appeals, and practical demonstrations, together with a thoroughly systematic discussion of the subject by a man who has been successful, are of peculiar value. I want to emphasize

this line of work, because there are no other agencies which can reach this average man like the farmers' institute. After he has been assisted to the practice of better methods he may then be encouraged to follow the farmers' institute for the sake of its education and social advantages, and may be induced to give his children the advantage of an agricultural education which he himself was unable to acquire.

Certain subjects of vital interest to the farmer do not permit of demonstration on the institute platform. Some of these have been demonstrated on individual farms in special communities and through the agricultural experiment stations. I refer to such fundamental subjects as crop rotations, the maintenance of soil fertility, the development of the dairy, poultry, or other special industries where a presentation of the principles involved should always be reenforced by reference to examples of men who have been specially successful in working out the details of a particular business. In nearly every agricultural community such examples can be found, and a brief discussion of the methods followed by these men will always tend to reinforce the arguments of the speaker and aid in bringing out further discussion on the subject which will be of material value to the audience.

A matter of agricultural advancement which is sorely needed to-day, and yet which is receiving very little attention, is that of developing the skilled artisan. Agricultural education is inclined to deal with principles and theories. In a limited way it is training its students in agricultural handicraft, but the number receiving instruction is so small a percentage of the agricultural population that their influence upon the country at large must be comparatively meager. There ought to be some other influence at work to train the farmers of the country in agricultural handicraft. If the farmers' institute movement could stimulate a desire among the farming class to become better artisans, with pride in their superior skill in the performance of their labor and with system in their farm operations, it would do much to raise the standard of the agricultural laborer, be he landowner or otherwise, and create a respect for the vocation. It is possible that not much can be done along this line by the farmers' institute itself, but the result might be secured through organizations like farmers' clubs, which could be fostered by the farmers' institute movement. The plowing contest of olden times had a far broader significance than testing the ability to plow a straight furrow. It promoted a friendly rivalry which developed the artisan spirit and produced a more efficient laborer. It also furnished a means of social intercourse, which is of value to the community. The artisan spirit might be greatly stimulated by offering prizes for the best conducted farm of any township or district, due importance being given also to the arrangement and condition of the farm buildings and fences, the system of rotations, the condition of the crop, fertility of the land, etc. I believe the Province of Ontario and possibly some of the States now have this farm contest in operation.

I understand that in Iowa some attention has been given to prizes in different districts for the best kept country road. Now, all of these things, I believe, should be stimulated by some sort of agricultural organization which tends to create a pride in doing things in the best way. I think that is a fundamental thing, creating in the farmers a pride in their business, and effort to develop all the lines of agriculture in which they are interested to the highest possible degree in handicraft.

In its broader outlook the farmers' institute movement must take up all those questions which affect the life of the rural community. The farmer and his family as members of society make up the community life. They should be interested in every movement. A love for the country is stimulated by attractive and healthful home surroundings, where the eye is gladdened and the senses are soothed by beautiful landscapes, neat and well-ordered farmsteads, and evidences that intelligent labor and persistent care have been expended upon these things. The establishment of a well-ordered farm is generally not so much a matter of money expenditure as of systematic thought and discussion on these subjects. The farmers' institute should deal with the improvement of home surroundings, the construction of convenient and sanitary houses and barns and securing proper landscape effects, the rearing and education of children under proper environment, and the development of the social life of the country. The country school, the country church, and the agricultural organizations which foster the general intelligence and social life of the community thus become of vital interest to the farmers' institute movement.

In line with the improvement of the home and home surroundings, the woman's work in the institute will doubtless prove of greatest benefit. In many States the woman's work in the institute has developed to a high degree of efficiency and helpfulness, where separate sessions are held for the discussion of subjects which are of special interest to women, and an independent organization maintained in cooperation with the regular institute work. I believe the women's work should only be separate from the general work of the institute when considerable funds are available for the purpose

and the work has become highly specialized. In the State of Nebraska special sessions might profitably be held at from 10 to 20 per cent of the institute points. At other places, in my judgment, it would reduce the general efficiency of the work to hold separate sessions for men and women. Still this is a matter of growth, and it is probable that development will finally lead to the separation of the work for men and women in one or more daily sessions.

The farmers' institute worker.—The character of the men who are to do the farmers' institute work of the country depends somewhat upon the ideas under which the organization is maintained. It is my judgment that there should always be upon the institute force a number of actual farmers who have been able to achieve more than ordinary success through business acumen and a thorough knowledge of the particular line of business followed. These men fill a place in the institute work which can not be filled by any man who does not live upon the land and depend upon it for his livelihood. So far as possible these practical men should always have a thorough knowledge of the scientific principles underlying the business which they practice and be able to explain them upon the institute platform. The time will soon come when the practical man who has not this ability can not be of use as an institute speaker. The institute movement to succeed must have a large and continually increasing number of men and women who have had a thorough education along agricultural and home economic lines and who can fairly be said to possess a knowledge of the best agricultural science of the age. If these men and women also have actual farm experience, their advice is likely to be more readily applied to farm conditions than if they are schooled simply in the science and have never themselves applied these principles in practice.

The farmers' institute gives an opportunity to place the work of the experiment stations before the public in a way which mutually assists both the farmer and the station worker. I believe it is highly desirable that the agricultural educator and experiment station worker maintain a close and sympathetic relation with the land. There is no method by which this can be done so effectually as for these men to spend some time upon the institute platform discussing with the people the subjects which they have investigated in the laboratory and field. This presentation of his special problem before the people whom it is intended to benefit helps to systematize and reinforce the essential factors in his mind and to bring the more important factors into their proper relation, so that the final results are better adapted to practical farm conditions. The presentation of the work of the experiment station through bulletins and the agricultural press is effective in reaching a limited number of the intelligent class of farmers, but the promotion of any new idea to be most effective requires a living advocate before the people. It is apparent that the station worker is less and less able to spend time in institute work on account of other duties; still he should never permit himself to be wholly divorced from this valuable means of keeping in touch with the people. Four or five years ago, in the State of Nebraska, the experiment station force did from 25 to 40 per cent of the institute work. My recollection is that the past year they did about 6 per cent, not because they are less willing to do this work, but because they are less able. It seems to me that the most dangerous thing to-day in our own State is that the increasing work of the school of agriculture and the experiment station is forcing these men to confine themselves to their routine, and is not permitting them to get out among the farmers and to actually see what is being done and what are the problems which confront the farmer on his individual farm. The experiment station man who is unable to get in touch with the men actually on the land loses his opportunity to be of the greatest service to the people, because frequently he will miss the problem which is pressing most upon the people for solution, and work upon some other line which is far less important to them. To obviate this condition the colleges and the experiment stations would need a larger number of men in order that the men may be sometimes available. In some of the States the men who do go out in this institute work have a special training in reference to the presentation of this subject before the people. This is where our experiment station men and our college men are liable to fail, because, while they have looked at a subject from one standpoint, they may not have given consideration to the point of view of the men and women who are to receive instruction, and they get wide of the mark sometimes and fail to impress the truth which they would be able to impress if they but knew how to present the matter in the proper light and from the proper point of view.

The institute movement suffers in many States from the fact that there is but a short institute season, which does not pay a salary sufficient to maintain the institute worker, and yet does not fit in with any other line of agricultural work. The most successful farmer can not spare three or four months from his business for this purpose, and few men of experience can place four months of the year at the command of the institute superintendent without some means of profitable employment during the

balance of the year. The institute must inaugurate a movement for some form of extension work which shall employ a body of trained men throughout the year, and some portion of this year must be given to short agricultural courses upon subjects of interest in the locality. These short courses at the school are all right, but this extension movement, if it develops as it ought to develop, must carry these more primary lines of instruction to the people, to the communities where this instruction is to be received. The carrying of this instruction to the community, instead of having any detrimental influence upon the college itself, is going to be the strongest factor in bringing students to the college for further instruction, in building up the central college or organization, and furthering the lines of agricultural education. All over the State with which I am familiar these lines of work would be received gladly, and they would be the strongest stimulus to further investigation and research and desire for education on the part of the boys and girls and the men and women who receive the benefits from these shorter courses of instruction. I refer especially to such work as the movable school advocated by Secretary Hamilton and the short courses in agriculture already installed in Iowa by Professor Holden, where for a period of two weeks the days are given over to grain judging, discussion of soil fertility and crop production, and studying improved breeds of live stock.

Local organizations.—It is also vitally necessary that every well-developed agricultural State shall have some form of local agricultural organization, meeting frequently in the locality, and dependent wholly upon local initiative. In many States the grange or the farmers' club supplies this demand, but in other States no such organization exists. I am convinced that these organizations should be more general and that to succeed their purpose must be mainly social and educational, and not mainly commercial. Nebraska has no such organization at present, and is sorely in need of such to aid in the forward movement of its agricultural work.

State and national support.—Much has been said recently about national aid for farmers' institute work, a movement which I heartily favor for some specific purposes, but not in any sense as a principal source of support or for the purpose of putting the institute work upon a Federal basis. The growth of this movement to date has been wholly under local and State aid. The initiative which has developed the work has been local. It touches local pride and develops local enterprise. This development from local initiative is necessary in the growth of any community movement which is to benefit and permanently upbuild the rural community. There are certain things which the State can not do for the community, and among these is the supplying of the initiative which is to develop any community movement. The State may point the way, it may suggest the form of organization, it may temporarily take charge of the work and show what can be accomplished by united effort; but unless it finds in the community men who are willing to take up the work and perfect and maintain a live organization, the institute spirit languishes, and the time and money expended in the work produces only indifferent results. Under State and local organization, local initiative is the basis upon which institutes are distributed and maintained. I am convinced, after several years of observation, that every locality should be required to bear a portion of the expenses of the institutes and that local officers should be in charge of the meeting. Now, in this point I have exactly reversed my view in the last half dozen years, and I understand that at the present time it is exactly opposite to some other institute men.

This helps to make the people feel that the institute is something belonging to the community, and not something brought in from the outside. In Nebraska a law was recently passed permitting the board of county commissioners to appropriate a sum not to exceed \$100 per county to help defray the local expenses of the institute, or institutes, held in the county. Where the sentiment is such that the people are willing to tax themselves locally for this purpose, the success of the institute is assured. State appropriations should, in my judgment, be administered through a central office and not be distributed by counties or by Congressional districts, though I understand there are several States in which this latter method is successfully followed. A central organization unifies the work of the several counties, greatly decreases the cost of furnishing efficient speakers, and develops interest in places where local initiative is not sufficient to start the movement. State appropriations should be liberal. They should permit the maintenance of a well-organized central office with a corps of energetic and devoted men. Under such conditions appropriations can not well be too large, for every dollar expended is returned tenfold to the people in the advancement of agricultural conditions.

Federal aid will be of material assistance in helping to unify the institute systems of the different States, in gathering and publishing statistics, and in collecting and disseminating important forms of agricultural knowledge. It could be of material service to new States with small appropriations in furnishing a speaker to assist in holding

institutes, and temporarily, perhaps for a year or two, put these weaker States upon a better basis, perhaps for more than a year or two. It is also desirable that the Federal Department should introduce and try out some of the newer ideas, like the traveling institute school, which no one has yet put in successful operation in any of the States. There may be some local methods more or less successful to do this which have not come under my observation. The farmers' institute extension work in Iowa comes nearer to this than any other State with which I am familiar, but as a rule none of the States have taken up this work yet, and it is in a formative stage. Some outside support is needed to get this movement past the experimental stage to see whether or not it is adapted to the several sections of the country. Some sections will probably take favorably to this work with but a short experimental period, while other communities will be slow in taking it up, and it may be perhaps impossible to introduce it. In sections of the country populated by foreign elements which have not been thoroughly Americanized and made progressive in their ideas it would be difficult to promote this idea, but start it in favorable localities, work it out in the sections where it will be most easily adapted, and possibly it can be adapted to these other communities.

This, it seems to me, is a line of work which the Federal Government could well foster. While the institute must never get away from the common man on the one side it must get away from the common man on the other side, and must be able to supply the needs of the most intelligent agricultural community in the country, because if it is not then it is making no progress along agricultural lines. It is coming up to a certain point where the community movement can not be deserted, and yet the initiative is not developed for furnishing the means and the organization by which the more intelligent and better educated agricultural community can go on making still further progress. Many States will be prevented from perfecting these methods in the field unless they can be assisted from some outside source like the Federal Department. The Department, having determined how to introduce these ideas successfully, should then turn the work over to the States to develop or modify, to meet their special needs. But the great and enduring service which a Federal department of farmers' institutes could accomplish would be to assist in disseminating the results of scientific work which is constantly being done within the United States Department of Agriculture. The people know almost nothing of this work, and under present methods of dissemination they are not likely to appreciate it for a generation to come. Bulletins and the agricultural press alone will never be able to disseminate that knowledge in the most effective way. As in case of the work of the experiment stations in the several States, many of the results secured by the Department are technical and need to be adapted before they can be of the greatest benefit to the farmer. The institute department with a corps of trained specialists could do this. The adoption of these new principles, like that of all agricultural knowledge, requires an advocate at court who can present the subject in a live and forceful manner by bringing out the essential details and showing how to apply the principle to the needs of the people. A bureau of dissemination is the most pressing need of the Federal Department of Agriculture.

The farmers' institute work undertaken by the United States Department of Agriculture should be most generously supported. This organization should not adjourn until it has strongly indorsed the farmers' institute movement by an appropriate resolution, and that we, as an organization, as well as the several States, after we have adjourned, should petition the Federal Department of Agriculture to ask for a liberal appropriation to support this Federal farmers' institute work.

Strive as we may to devise ways and means for the improvement of rural life, we come back finally to the institute for a more general education of all the people in those pursuits which relate to their daily life. This education should begin with the primary school and should cease only with retirement from active life. The consideration of this problem shows that the farmers' institute movement is only one of the many energizing movements on foot for the dissemination of agricultural education. That it should be correlated with these several movements would seem, therefore, to be apparent. It can reach down to every individual farmer and stimulate an interest in better methods. It can show how individual farmers have made a marked success in some particular line of industry by practicing the best methods. It can help to furnish the social life of the community and stimulate a desire for education among the boys and girls who grow up on the farm. It can develop an interest in the improvement of the country school so that gradually better methods may be introduced and subjects taught in their relation to the daily life of the pupils. It can stimulate a desire for a broader and more thorough knowledge of the things which relate to the life of the farm. It can develop an interest in the agricultural high school and agricultural college as something to be looked forward to and realized by the farm boy and girl at the earliest opportunity.

The farmers' club, the debating society, the farmers' institute, furnish the leading opportunities for the discussion of social and economic questions. Such organizations should be encouraged in every locality; whether in the beginning they be strong or weak, they make for the social culture and intellectual power of those who participate. They often furnish the incentive and desire for a better education and a more complete training for life's work. To the young man or woman returning from school to the farm, these organizations afford the intellectual stimulus of personal contact with men and women of the same social class. The practical demonstration of his knowledge upon the farm becomes the convincing argument among his associates that education enlarges the powers and capacities of the man and makes him more successful in his business. The educated farmer is alive to the importance of a familiarity with present-day questions, he recognizes the obligations upon himself and his family to foster the work of the country school and organizations for agricultural progress, and he educates his children so that they may take their proper place in society.

I rejoice that the farmers' institute has had so large a part in the great forward movement in country life, and that to-day it is doing more than ever before to accelerate this progress. Farmers' institute workers have often received inadequate support and scant sympathy from the people they sought to benefit. I believe that this lack of appreciation is rapidly passing, and that with more generous support will come a fuller appreciation of the work. It is the duty of the men and women charged with the responsibility of this work to go forward with renewed confidence and faith in its final achievement, remembering that no effort is too great to put forth in uplifting the people in moral and intellectual standards.

DISCUSSION OF PRESIDENT'S ADDRESS.

The discussion of the president's address was opened by L. R. Taft, of Michigan, as follows:

The president, in speaking of agricultural progress, stated that it demands of every man that he be intelligent and skillful in his particular vocation, and that the farmers' institutes create a desire for improvement and furnish the information that makes this improvement possible. I think that all agree with that assertion. How to furnish this information that the farmers are calling for is the problem that we are appointed to solve.

We agree with him also when he says that institutes can best help the average man by showing him how he can increase his income through his farming operations. Nothing will so quickly bring him into sympathy with the institutes as information in this direction. Having secured this sympathy, the institutes will begin to appeal to him in other respects. Along this line are movements of various kinds, such as those favoring good roads, the consolidated and agricultural high schools, the subjects of forestry and home decoration, which should all have a place on the institute programme.

One of the most effectual methods of interesting farmers is by means of demonstration meetings that show, in a most convincing way, how certain farming operations should be performed. We are doing this in our institutes, cooperating with our granges and our farmers' clubs, of which we have about a thousand. During the summer months they meet out on the farms with the farmers; and if they exercise care in selecting the place and the time for the meetings, they are able to secure large attendance, and by means of the objects at hand for demonstration to bring out many valuable points. The members can there see how the farmers have done their work, and often the very failures of these men become a means of benefit. We have observed also that where a farmer knows that he is to have this grange or farmers' club meet at his home he will take greater care in conducting his work. Where these granges and farmers' clubs are well organized there is, of course, less work for the institute, but in other States not organized for this work there is certainly a broad field for institutes along this line.

Respecting the institute lecturers, we should have among them a considerable number of practical and successful farmers. It is very necessary to consider both of these qualifications—practical and successful. Nothing will so quickly follow an institute worker as his failure as a farmer. He must be a good farmer in every sense of the word, and practical as well. Even though a man has been on a farm for twenty or thirty years, and been successful, if for any reason he leaves the farm and moves to town, almost immediately he loses a large part of his value as an institute lecturer. It would seem that with his extended experience on a farm he should, as he goes from place to place and meets other farmers, keep up to date, but in practice we find that just as

soon as it is known that he has left the farm he loses a large part of his value as an institute teacher. We are compelled to call largely upon practical farmers for our speakers. To make them most serviceable we find it well to hold a normal institute each year and bring them to the college, or at least to some central point, and devote a few days before the institute season begins to going over the points which they will discuss, and have explained to them, by members of the faculty of the college who have worked along these lines, the fundamental scientific principles that underlie the truths they teach.

Of the requests that come to me for speakers, I find that, as a rule, the majority ask for members of the faculty of the college who have worked along what you might call practical lines and who, of course, are in entire sympathy with farming pursuits. Next in the list are those who are graduates of the college and have become successful farmers. Then, in the third group, are the successful practical farmers who have a good education and who have ability to present their thoughts in a forcible and attractive manner.

We find a growing need for permanent institute lecturers. Although we have not yet reached the point, I believe that very soon we must have available a number of men who are able to give their time largely to institute work. We have calls outside of the institute season that we would be glad to meet if we had men available, but the practical farmer, as a rule, can not leave his work to address a meeting at this time. We must therefore have something along the line of agricultural extension, either in the institute system or from some other source, which will provide permanent employment for the lecturer. As the president has so well said, we must give more attention to the short courses in agriculture away from the college.

Respecting the women's institute. We have been carrying on this work for fifteen years, and I think that they are doing better work now than ever before. In at least two-thirds of the counties they are called for. We call them the women's section, lasting from one session to an entire day. The other counties without exception want a woman speaker on the force in our two-day institutes and unless one is provided I hear about it.

We have each year studied the question of the "central" organization, and the more I see of the benefits of it the more I am convinced that we must have this along with the local organizations, as the president suggested. I believe that we should place the local arrangements, local expenses, etc., in the hands of these local organizations, and that wherever possible the funds for local expenses in the way of halls, printing, advertising, etc., should be raised locally. I know that there are some counties that make appropriations for it out of county funds, but I hardly think that such county support could be secured from anything like a majority of the counties. Local subscriptions or membership fees ought, therefore, to take its place.

On the question of national aid we are all looking to our institute specialist for assistance, and if we can in any way hold up his hands and secure him the means with which to furnish us the help that he wishes to supply we should do so. We certainly need and could utilize that help in many ways, some of which the president has mentioned.

Last of all, we should, I believe, make the institutes highly educational. As soon as we have interested the farmer and can get him to come out to the institutes we should extend the work that we are doing along educational lines. There are, it is true, very few places as yet where we can give up the idea of the pecuniary benefits that come to the farmer through the institute meeting, but just as soon as we can develop this work still further and make it also educational I believe the cause of agriculture will be greatly uplifted and benefited.

ADDRESS BY DR. A. C. TRUE.

Upon invitation of the association A. C. True, of the United States Department of Agriculture, addressed the meeting:

The Office of Experiment Stations is very glad to welcome you here, and I hope that during your visit you will be able to call on us and to give us the inspiration of your presence at the Department. I am also glad of this opportunity to say a word to you. I think sometimes that because of the peculiar nature of my work people get the idea that I am not very much interested in the practical side of this movement for agricultural progress. That, perhaps, has grown out of the fact that I have been obliged for a good many years to devote myself especially to an effort to raise the grade of the work of our experiment stations. During the past year or two, particularly, as the result of the passage of the Adams Act, I have been called upon to urge very strongly the strengthening of the scientific side of the work of our stations. But while this is true,

as my experience increases in work related to the stations, the agricultural colleges, and the other agencies for agricultural education, I am more and more impressed with the need of having this whole movement keep in close touch with the practical farmer.

Unless we can get at the average man on the farm and educate him so as to make him a more successful practical farmer, we have failed in this whole enterprise. Therefore, I would like to emphasize what the president of this association has said here this morning regarding the great importance of keeping this farmers' institute work in close touch with the practical farmer. I try to practice as well as I can what I preach in this regard, and so I make it a rule to spend my vacation on the farm, not the poorest kind of a farm, but a good ordinary farm, where a single family is being supported by their own labor on the land. I try to follow the operations of that farm and to take a little part in them, and so to get in vital touch year by year with actual farm life itself.

The work that your organization and those you represent is engaged in is extremely important. I appreciate that more and more. We must have in this country a much more efficient means of getting at the practical farmers through the living teacher, and thus bringing home to them the results of all the investigation that is going on in their behalf.

We have been sending out publications almost without limit, and they have done much good, but if we stop there we shall have only a very moderate measure of success in educating the mass of farmers for improved practice. If we can get at them year after year in their own communities with the living teacher, there is great hope of improving conditions, so that agriculture as a whole shall become a really progressive industry, and our farmers generally shall be intelligent and progressive men. Therefore, I hope that this organization will have the greatest success in its work and that as a result of its deliberations here much may be done to strengthen this great system of farmers' institutes throughout our country and the Dominion of Canada.

After the calling of the roll of States, Territories, and Provinces, and the admission of new members, the association adjourned until 2 p. m.

AFTERNOON SESSION, WEDNESDAY, OCTOBER 23, 1907.

The convention was called to order at 2 p. m., the president, E. A. Burnett, in the chair.

The following are abstracts of reports which were submitted for the various States, Territories, and Provinces. Statistical data will be found in the tabular statement (p. 78).

FIVE-MINUTE REPORTS FROM THE STATES, TERRITORIES, AND PROVINCES.

ALABAMA. By C. A. Cary, Auburn.

From July 1, 1906, to July 1, 1907, the farmers' institute work in Alabama was directed along the line of the improvement of the live-stock industry, with special reference to cattle-tick eradication. Other agricultural lines were not neglected. Stress was placed upon the necessity of home production of feed stuffs, rotation of crop, and diversified farming.

The funds available for this work are insufficient for anything like making a complete canvass of the entire State during one year. For several years the small sum of \$600 has been all we have had with which to conduct the work. A like amount has been devoted to the summer school for farmers, which was held at Auburn during the latter part of July and the first part of August, 1906. There were 405 enrolled at this school, and representative farmers were present from nearly every county in Alabama. No distinctly new features were tried during the year.

ALBERTA. By H. A. Craig, Edmonton.

Last year a perambulating stock-judging school was inaugurated. About 50 animals, including horses, cattle, sheep, and swine, were secured from the best herds within the Province. They were loaded into two cars which were rented and fitted up specially for the work. A staff of from six to eight instructors, all of whom were experts in their line, traveled with the school, and with the animals before them discussed the more desirable types of each particular class and breed of stock. At the close of each school a stock-judging contest was held, prizes being offered for the best judging of live stock, open for competition to members of the school only.

ARKANSAS. By W. G. Vincenheller, Fayetteville.

Nothing was done in Arkansas in institute work last year by the experiment station, but the Bureau of Plant Industry of the United States Department of Agriculture held a number of institutes throughout the State at its own expense. There were 40 institutes in all, with an attendance of about 3,000.

CALIFORNIA. By Warren T. Clarke, Berkeley.

During the year ended June 30, 1907, no new methods of work were inaugurated in the institutes in California. The work this year consisted mainly of meetings of a general character, though, to a limited extent, the "special-purpose institute" was further developed.

COLORADO. By H. M. Cottrell, Fort Collins.

The work for the year has been the extension of farmers' institutes to cover all the agricultural sections of the State. Institutes have been held in every county where there are agricultural interests. One six-day farmers' short course was held in Delta, a point situated 450 miles distant from the college, and 112 farmers attended who were not able to spare the time to make the long trip to the agricultural college for the regular short course. During the year ending November 15, 1907, 113 institutes were held with a total attendance of 19,790 persons. Fifteen stops were made on the Santa Fe institute train, with an attendance of 1,705. Through the farmers' institutes and the institute train the college force has met during the year 21,495 people.

CONNECTICUT. By J. G. Schwink, jr., Meriden.

[For the Dairymen's Association.]

The work of the Connecticut Dairymen's Association for the past year is a continuation of the old system. We are endeavoring to reach out into new fields and the remote districts with our regular and our field institute meetings. The field meetings during the year have been getting out special programmes, engaging speakers, securing practical men to demonstrate the work as carried out on the farm where the meetings are held, and also have been employing competent judges to score animals of the different herds and breeds. This demonstration work has been found to be very interesting and instructive. In the institute meetings the effort has been to secure as lecturers college and experiment-station professors and also some of our most successful dairymen. The meetings have been very interesting, eliciting discussion, and the attendance has largely increased. The annual round-up meeting last year resulted in an attendance of over 650 interested people at each session of the two-day meetings.

DELAWARE. By Wesley Webb, Dover.

(See statistical table.)

FLORIDA. By P. H. Rolfs, Gainesville.

(See statistical table.)

ILLINOIS. By Mrs. I. S. Raymond, Sidney.

A State association of women's institutes, under the name of Domestic Science Association of Illinois, is trying to organize all of the counties of the State. There are altogether 102 counties, and in 79 of them women's associations have been organized. In all of these 79 counties the women had a part in the regular farmers' institute sessions. No record has been kept of the number in attendance. We have 21 speakers on our list, and the cost of the women's sessions was \$1,070.

INDIANA. By W. C. Latta, Lafayette.

The farmers' institute work of Indiana did not differ materially the past year from the work of former years. Increasing attention is being given from year to year to work at the institutes calculated to interest and help the young people. There is also a growing interest in work for and by women at the farmers' institutes. During the two years past a domestic-science instructor has been in the field practically throughout the entire season. This line of instruction is much appreciated, and the demand for it has been greater than the management has been able to fully meet.

The general assembly of 1907 passed an act making ample provision for the local expenses of the farmers' institute association and for conducting contests of various kinds in the interest of the young people.

IOWA. By P. G. Holden, Ames.

It is my conviction that the greatest movement in education to-day, and one which will continue for some time to come, is that of taking education to the people. In this extension movement in Iowa special attention has been given to corn simply because corn affects the pocketbook of everybody. It was a thing that they all knew about and could grow, and as they began to see how much there was to be known about it there came a demand for information respecting it, and gradually out of that demand has grown the extension movement.

The extension teaching in Iowa embraces six or seven different lines of work. There is an appropriation of \$27,000 and a corps or faculty of lecturers consisting of ten different people. One man does nothing but encourage the teaching of agriculture in the public schools.

MAINE. By A. W. Gilman, Orono.

For the year ended June 30, 1907, there were 33 farmers' institutes held, a State dairy conference of three days, and six special meetings in connection with granges and farmers' clubs. At the 33 regular institutes 65 sessions were held, and the total attendance, reckoning as present only those in attendance at the largest session of each institute, was 4,771. The total cost of institute work and dairy conference was about \$3,000. Two institutes are held in each county each year, as required by law, and the balance of the funds is used in the sections of the State where the agricultural interests are most extensive.

MANITOBA. By W. J. Black, Winnipeg.

In this Province at the present time the organizations carrying on educational work in agriculture are known as agricultural societies and are under the guidance of a managing director who is head of the department of agricultural societies and college extension work in the provincial agricultural college. Work that in the past has been classified under the head of institutes is now known as college extension work.

MASSACHUSETTS. By J. Lewis Ellsworth, Boston.

There have been no strictly new features introduced into the work of the year, but several important points have been emphasized and broadened. Demonstration meetings received particular attention during the year. The circuits of institutes which have been held for some years have proved very popular, and in this way it has been possible to furnish our audiences with speakers whom they would not otherwise have an opportunity to hear and who perhaps average better than the regular list of speakers. The appropriation of the board for the "dissemination of useful information in agriculture" was increased \$1,000 by the legislature of 1907.

MICHIGAN. By L. R. Taft, Lansing.

During the year which ended June 30, 1907, 329 institutes were held in Michigan, 4 of which lasted three or more days, 63 lasting two days, and 262 one day, with a total of 965 sessions and an attendance of 114,696, including the round-up institute, which lasted four days, with a total attendance of 10,100.

In addition to the above a normal institute for the lecturers, lasting three days, was held in November. This was attended by all but two of the lecturers, at their own expense, and proved very helpful. In April a special institute train was run over two of the railroads, making sixty stops of about one hour each. The trip lasted ten days, with a total attendance of 6,793.

While no distinct "boys and girls'" meetings were held, the evening programmes were designed to interest them and they were very generally upon the programme for papers, as well as for readings and music. In one county, Oakland, the local association provided seed corn for as many boys as would agree to plant and care for it. The product was shown at the local institute and later on at the county institute, where the prizes were awarded. Each boy was expected to prepare a report upon his experiment.

The women's sections, which were held in 42 counties, were very well attended, and in some cases the number present exceeded that at the general session.

During the year 1906-7, \$8,350 was expended for farmers' institute work in Michigan. Of this amount, \$1,650 was used for salaries and office expenses, including apparatus; \$1,200 was spent for printing and postage, including the printing and distribution of 10,000 copies of the annual institute report; \$800 went for the normal, round-up, and special train institutes, leaving \$4,700 for the per diem and expenses of the lecturers at the regular institutes. This is an average of a little less than \$5 per session, or approximately \$7.75 for the sessions of the two-day institute, for which three or four speakers are furnished, and \$3.25 for each session of the one-day institutes, for which the usual number of speakers has been but one.

MINNESOTA. By A. D. Wilson, St. Anthony Park.

(See statistical table.)

MISSISSIPPI. By E. R. Lloyd, Agricultural College.

The method of holding institutes in Mississippi is defective in that, as a rule, too many subjects are presented at a time, and plans are discussed and information given which can not be put into practice for several months.

Eight county high schools have organized boys' corn-growing clubs, with an average membership of about 75. To help and encourage this work the farmers' institute department published a corn bulletin for the use of the clubs and furnished lecturers and judges. This season a few two-day institutes were held, with the afternoon session devoted largely to practical demonstrations, as clinics, stock judging, grafting, budding, and pruning. A few field institutes were also held this year.

MONTANA. By F. S. Cooley, Bozeman.

Last winter the legislature increased the yearly appropriation for institutes from \$4,000 to \$7,500. In view of this fact, it was decided to get an assistant to the superintendent, who would devote his whole time to the farmers' institute work. In accordance with this plan, Prof. F. S. Cooley, of Amherst, Mass., was engaged to take immediate charge of the farmers' institutes of the State, and he entered upon his duties on September 1, 1907.

NEBRASKA. By Val Keyser, Lincoln.

The past institute season opened November 20, 1906, and closed March 12, 1907. In all 136 institutes were held, and 65,419 persons were reported to have been present at the various sessions of these institutes. The State appropriation for the last year was \$6,000, and the local expense reported was \$2,684.04. Part of this was appropriated by the county commissioners. The number of institutes was decreased from 160 in 1905-6 with 515 sessions to 135 institutes and 442 sessions in 1906-7. This decrease was partly due to the fact that the railroads were not permitted to issue free transportation for the speakers, causing increased expense in the conducting of institutes.

No round-up institute is held on account of the meetings of Organized Agriculture the third week of January. Over 1,500 people attended these meetings during the third week of January, 1907.

Seventeen different State agricultural associations held their meetings at this time. Among these meetings was the farmers' institute conference of the speakers and officers of local institutes, held on Friday, January 18. About 200 people were present. The object of the conference was to discuss methods pertaining to the management of farmers' institutes. A set of bulletins pertaining to the corn-contest work is being published by the department of farmers' institutes in cooperation with the State Department of Education.

NEW MEXICO. By J. D. Tinsley, Agricultural College.

The year 1906-7 was the first year of systematic institute work in New Mexico. There having been no Territorial appropriation as yet, the work has been done by the agricultural college under the supervision of Prof. J. D. Tinsley. The plan has been that of calling meetings in a number of towns, and after a lecture on some topic of special interest to the locality, a committee on organization is appointed.

NEW YORK. By F. E. Dawley, Fayetteville.

In New York we have continued the policy which we have laid down of holding special institutes for bee keepers, poultry breeders, fruit growers, dairymen, potato growers, and others. In these special meetings, speakers who have achieved results, as well as reputation, are brought before the audiences, and so far as possible demonstration work is carried on. Our special poultry institutes have perhaps been the most successful of any we have held, and the attendance has been large. Our fruit and potato growers' institutes are held in the field, where spraying demonstrations, methods of cultivation, and results are shown by practical work.

We have inaugurated a system of women's institutes and this year are holding 25 of these meetings in the northern and western parts of the State, holding but one in each county. At most of the institutes held last winter we devoted one period to the children's hour, in which we found that children, parents, and teachers were all equally interested.

NORTH DAKOTA. By T. A. Hoverstad, Fargo.

Last year we scheduled a large number of institutes, but owing to the large crop that we had in North Dakota to be taken out of the State by the railroads, and the large amount of fuel to be taken back again into the State, and the excessive amount of snow, it was found difficult to continue institutes, so that the first of February they were abandoned because we could not get to the institutes in time. We took it up in the spring and did the work then that we should have done during the winter. There were no particularly new features introduced during the past year, and we do not intend to introduce anything new in the immediate future, but rather to work along the old methods and try to make these as effective as we possibly can. We have tried to have the institute work in harmony with the needs of the State. The southern part of the State is 25 years old, while the western part is new. Settlers are coming in by the thousands, so that we have to adapt our work largely to the demands of the various sections.

OHIO. By T. L. Calvert, Columbus.

We held in Ohio between December, 1906, and February, 1907, which is our period of institute work, 299 institutes, with an attendance of 92,400. We employed last year 40 lecturers. They were Ohio men, with three exceptions; one from Virginia, one from New York, and one from Indiana. We have no reports from the harvest home or farmers' picnics. We held in addition 36 independent institutes. The cost of our institutes was a little over \$19,000. Under the laws of Ohio there is an act which allows \$250 to each county, \$125 of which goes to the State board to defray the expenses of the institute lecturers, and \$125 goes to the local associations for their local expenses. The law provides that there can not be over 4 institutes held out of this fund in each county. Three hundred and fifty-two are all that we can hold under the law, yet this year we will hold about 324 institutes. Last year we had 299.

OKLAHOMA. By C. A. McNabb, Guthrie.

(See statistical table.)

ONTARIO. By G. A. Putnam, Toronto.

During the past year the institute work in Ontario has been continued pretty much along the old lines. We have endeavored to develop the use of charts, live animals, seeds, and samples of farm products generally in demonstrating the work of the lecturers.

More attention than usual has been given to the matter of specialization of the meetings held. A series of fruit meetings was arranged for the purpose of giving instruction in the benefits and methods of cooperation, not only in the production of fruit, but in its packing, selling, and marketing. This was followed by marked results, and we now have thirty-five or forty active cooperative fruit associations. Uniformity of methods will ultimately be secured over the whole Province and permanent profitable markets established.

A special series of meetings with the object of inducing the farmers in one section of the Province to pay greater attention to the production of bacon were also held. These created a deep interest and had a marked influence on the industry.

The cooperation between the farmers' and women's institutes has continued. The total attendance at women's institute meetings during the year was over 70,000, while the attendance at the farmers' institute meetings was nearly 112,000. The women's institutes are organized in some 400 places, at all of which regular meetings are held.

PENNSYLVANIA. By A. L. Martin, Harrisburg.

The institutes in Pennsylvania for the year ended June 30, 1907, if judged by the attendance and interest manifested on the part of the farmers and their families, are quite encouraging. There were in all 392 institute days with an attendance of 147,895, not including special institutes, which had an additional attendance of 15,000.

The instructors, both men and women, are experienced and well informed in the various subjects which they undertake to teach. The farmers have complete confidence in the men who have been selected as lecturers.

The few movable schools of agriculture that were held in 1907 have led to a more complete development of this work. We are arranging for the coming year to hold at least one of these school meetings in each Congressional district. For the present we are taking up three distinct lines of study, namely, dairying, horticulture, and poultry. A syllabus of the subjects to be studied at these meetings is printed and put in the hand of the members of the class who have previously enrolled their names, pledging attendance at every session held by this movable school. The schools provide more thorough instruction than the general institutes and should they meet our expectations will develop a class of farmers well equipped in the special lines of farming which the schools represent.

PRINCE EDWARD ISLAND. By S. E. Reid, Charlottetown.

Classes in live-stock judging, and others in seed judging and in the identification of weed seeds, were held in different centers during the year. The stock used for instruction purposes was all transported by rail to the various points where the classes were held.

QUEBEC. By G. A. Gigault, Quebec.

The farmers' institute work in the Province of Quebec is peculiar in that it is organized in the form of incorporated farmers' clubs. Each member of a farmers' club must pay a yearly contribution of \$1. There is an additional government grant amounting to 50 cents per member. There are 591 of these clubs in operation in the Province, with a membership of 55,141. The receipts from the members last year were \$69,766.23 and from the general government \$25,260. The clubs meet frequently and listen to lectures and discussions upon agricultural matters.

SASKATCHEWAN. By J. Bracken, Regina.

The new work inaugurated during the past season was that of conducting classes in agriculture for the young men of our farms. One of these classes was held last winter and proved sufficiently successful to warrant giving the plan a further trial this season. The arrangements are that an agricultural society must guarantee that at least 15 young men will attend the classes regularly, buy the required text-books, and follow systematically the course of reading outlined. The Province agrees to furnish free of charge a capable instructor. This year 10 agricultural societies expect to carry on this work.

SOUTH DAKOTA. By A. E. Chamberlain, Brookings.

No institute work of an entirely new character was undertaken in this State last year. It was the second year of institute work in South Dakota, and the appropriation was only \$5,000. An attempt to inaugurate any very advanced features in the work at this time did not seem justified. So many meetings were demanded that it was impossible with the money at hand to do more than good elementary work. There was an effort, however, to make a specialty of good seed, particularly in corn, and of dairying and fine cattle. A testing cloth for testing seed corn was made and given to each farmer attending the institute, and a great many reports from their use have been received. They unquestionably have been of great benefit to the corn growers of South Dakota. Some work that is new, at least to us, in farmers' institutes is planned for the coming season. During the present biennis there will be \$2,000 per year more money with which to work than during the previous two years.

TENNESSEE. By John Thompson, Nashville.

The addresses delivered by the representative of the bureau of agriculture in Tennessee before the farmers' institutes have all made the teaching of elementary agriculture in the public schools a leading feature. The lecturer suggested that demonstration plats adjacent to each schoolhouse in the State should be laid out and used in teaching elementary agriculture in a practical way. This idea has met with universal approval on the part of the farmers, and we feel sure that within the next year the practice of teaching elementary agriculture in the public schools in Tennessee will be thoroughly inaugurated and prove productive of great good in the interest of agriculture.

The institute work, as organized by the former commissioner of agriculture, has to a great extent been continued, and the farmers of Tennessee are taking greater interest than ever before in this work.

UTAH. By L. A. Merrill, Logan.

The State appropriation for farmers' institute work in 1906-7 was \$1,500. The agricultural college set aside an additional sum of \$1,000 for extension work. The extension work and the farmers' institute work are carried on in charge of a farmers' institute committee, of which the director of the agricultural experiment station is chairman. A series of five-day farmers' institute schools were held in various localities throughout the State, to which an admission fee of \$1 was charged, or in lieu of this a guaranty fund from some reliable person or organization to the amount of \$50. The usual programme is three sessions a day for the men and two sessions for the women, the evening meeting for the most part being joint sessions. Six of these schools were held, with an average attendance of about 50 for the day meetings and 150 to 200 for the joint evening meetings. In Manti there were 100 women in attendance at the first session, and over 150 course tickets were sold to women and about the same number to men. About an equal number of one-session, one-day, and two-day meetings have been held. The total attendance at the regular institutes was 1,280, and the number of sessions held 24.

WEST VIRGINIA. By H. E. Williams, Charleston.

New work.—The introduction of special subjects at our institutes has been a means of great good. We made it an object to have discussed at each institute three subjects, viz., the public roads, the dog tax and sheep protection, and the farmers' organization. The effect was such a demand by our farmers on the legislature, which met last January, as to cause that body to create the office of the highway inspector, to make investigations and report to the governor and to the next session of the legislature the needs of the State in the matter of better roads. Special lectures upon household economy were introduced into the institutes in West Virginia in the months of December and January last. We have received most favorable reports of the work and have on every occasion urged that it be continued.

WISCONSIN. By George McKerrow, Madison.

The work of the Wisconsin farmers' institutes for the year ended June 30, 1907, consisted in 60 two-day meetings, covering the agricultural districts of the State, and the three-day round-up, which furnishes the material for the twenty-first annual farmers' institute bulletin.

Sixty thousand copies of Farmers' Institute Bulletin No. 20 have been printed and distributed throughout the State, at a cost aggregating \$5,500.

The legislature of 1906-7 increased the annual appropriation for farmers' institutes from \$12,000 to \$20,000 and passed a law requiring a report of the expenditure of this amount direct to the secretary of State.

The new work undertaken would more properly come under the heading of enlargement or development of old work. The discussion of bovine tuberculosis has been enlarged upon by way of teaching the farmers to make their own tests and acquainting them with the work of the live stock sanitary board in the condemnation, appraisal, and slaughter of herds, etc. The force of regular State lecturers is 23, with probably as many more who have taken part in local institutes, but who are not on the regular staff of the Wisconsin farmers' institutes.

About \$5,500, as noted above, was spent in publishing and distributing the 60,000 bulletins. The balance of \$6,500 was spent in holding the 61 meetings.

WYOMING. By J. D. Towar.

The State appropriated \$100 annually to each county to take care of the local expenses, which may include traveling and other necessary expenses of lecturers and the per diem of lecturers not connected with the State University. It is planned to hold a two-day institute in each county of the State, and, if arrangements can be made and the local people require it, a few one-day institutes will also be conducted. The university has \$1,000 to carry on this work, in addition to the \$100 belonging to each county. The situation looks very promising and should work admirably as soon as the initiative work of organizing the local societies is perfected. This we are undertaking now and hope to report progress on the same as time advances.

REPORT OF THE FARMERS' INSTITUTE SPECIALIST OF THE UNITED STATES DEPARTMENT OF AGRICULTURE FOR THE YEAR ENDED JUNE 30, 1907.

By JOHN HAMILTON, *Washington, D. C.*

Total number of sessions of institutes held in 44 States and Territories reporting, 11,448.

Total attendance at regular institutes in 43 States and Territories reporting, 1,592,202.

Attendance at special institute meetings in 26 States and Territories reporting, 104,224.

Attendance upon railroad specials in 6 States and Territories reporting, 51,505.

Total attendance, as above, 1,747,931.

Appropriation to institutes, 44 States and Territories reporting, \$285,950.67.

Cost of institutes in 44 States and Territories reporting, \$255,413.25.

The average cost of the institute per session in 42 States and Territories reporting, \$27.82.

No institutes were held in Alaska, Nevada, Porto Rico, and Texas.

INSTITUTE ORGANIZATION AND METHODS.

Fred H. Rankin, of Illinois, reported on this subject as follows:

The institute lecturer should know something of the aims and problems of the audience that he addresses, so that he may present his subject from the hearers' point of view. The purpose is to elicit discussion, and this is impossible unless sufficient interest is excited to make men forget their timidity and ask questions for information. Tact, enthusiasm, knowledge, and ability to present truth in a forcible and agreeable way are requisites in a first-class institute lecturer.

It is important in working up an institute meeting to secure the cooperation of the local newspapers. Since much of the patronage of these papers comes from the farmers, the editors are usually quite willing to lend their aid in advertising the institutes by the insertion of the programme in their news columns and an occasional editorial comment.

Many institute directors depend too much upon speakers from abroad. Two, at most, are all that are actually necessary in any one institute. Most of the papers or addresses should be by citizens of the neighborhood. These papers should be short and pertinent, so as to elicit discussion. The chief object in institute work is to awaken interest on the part of those who are present and start them to thinking for themselves. The information given by speakers, whether at home or from abroad, will be of comparatively little value unless it stimulates thought. The most capable teacher is the man who sets his hearers to thinking both clearly and correctly.

A crowded house is not always an indication of a successful institute. The real test is the influence of the meeting upon the men and the women who attend it, in the direction of the improvement of their farms and homes. The institute that fails to set in motion movements of this character is a failure, no matter how famous the speakers, or fine the music and entertainment, or crowded the hall.

A. M. Soule, of Georgia, reported as follows:

There is a potent reason why the institute system should now be under the control and direction of the State college of agriculture. Recently we have come to realize that the work of the institute, to be most successful and lasting in its benefits, must be carried out on a more comprehensive basis than formerly. There must be greater definiteness in organization, and the character of instruction provided in the future

must be of a more comprehensive type. In other words, the institute system has now become more distinctly educational in its character than in the past, and, in fact, in some States has discharged, to a very considerable degree, the functions which may properly be assigned to a department of extension work.

The plan of work to be followed in conducting the institutes will depend to a very considerable extent on the peculiar needs of the people in a given locality. For example, no system of institute organization can be outlined that will fit the entire South, for the climatic conditions prevailing in the mountainous sections of the Appalachian region vary as widely as those of Canada from those peculiar to Florida. In this same area almost every crop known to mankind can be successfully grown. For instance, in some sections cotton is grown exclusively; in others, fruit raising is the chief industry, and in still others, stock husbandry and mixed farming. The institute work must be so planned as to be adapted to the needs of the farmers who reside in the various soil and climatic provinces of the Commonwealth. The work must also be so timed as to give special information to the people when they can utilize it to the best advantage. The discussions must pertain to the crops chiefly grown in that locality, though it is often wise to bring prominently to the attention of the people some new crop or form of agricultural industry which they could follow with benefit and profit.

The peculiar needs of the people must never be lost sight of. In some sections, where education has not advanced as rapidly as in others, the most elementary type of lecture must be given. In other sections, where scientific methods are not new, a much higher character of instruction will be necessary. The wise and efficient institute director will study these and many other problems which can not be outlined at this time.

The following plan has been found quite effective in securing representative audiences of from 50 to 500 or more at institutes. When the time and place of holding the meetings have been definitely decided, an announcement is sent to the newspapers of that locality. A list of subjects that can be discussed is submitted to some of the leading farmers, and those about which information is most eagerly sought are placed upon the programme as the main topics for discussion. Four or five notices are then prepared and sent regularly to the local papers. Experience shows that the editors will nearly always use information sent to them prepared for publication, but frequently will not take the pains to prepare anything themselves. By sending these notices to the papers all the reading people in the community are informed about the institute. Then, send an advance agent to visit the locality. He should carry a large number of programmes with him and endeavor to interest the county superintendent of public instruction and, through him, all the school-teachers of the district. He should canvass the town in which the institute is to be held and secure the cooperation of the merchants and leading citizens. Where work of this character has been efficiently done a successful institute is assured, even in communities noted for indifference with regard to such matters. This requires more effort than has usually been put forth by institute directors, but the plan has been successful wherever conscientiously tried.

The special agent should endeavor also to interest the children and women in the institute. Special lectures should be provided on each programme describing features of their work. Interest aroused among the women and children will stimulate the men to greater efforts, and the institute become of general interest instead of benefiting only a few. It is well, if possible, to have the meeting held at about the same date each year in each locality, as it then becomes an event expected and provided for in advance. If the maintenance fund will permit, special prizes for children's competitions on the growing of corn, cotton, and various other farm crops should be encouraged. The most successful and satisfactory institutes have laid special emphasis on this feature of their programme. The products of the children's energy furnish the best type of illustrative material for the lecturer to use in discussing subjects of interest, as seed selection, bread making, vegetable growing, etc. The need of improving the rural home by disseminating more widely information with reference to household economics, architecture, sanitation, and kindred topics, justify greater efforts being put forth in the future to interest the women in institute work than has been done in the past.

In preparing the institute schedule too many subjects have been placed on the programme, compelling the discussions to be limited to a very brief period or excluding them entirely. It would be much better to adopt the school plan, and reduce the number of lectures, lengthen the period for discussion, and require the lecturer to use more the graphic method in presenting his ideas. The plan of presentation should not be complicated, abstruse, or made difficult of comprehension, even to those of the most

limited education, but it should be vivid and the portrayal of the ideas should be forcible and concise. It is much easier, for instance, for a farmer to understand the facts brought out by a lecturer demonstrating the necessity of selecting and improving corn if the instructor will take a dozen ears of corn grown in the community and use them in his demonstration. It is important that demonstration lectures of this kind shall be a feature of our institute work, and where it is impossible to secure for illustrative material the article itself, then prepare a set of charts showing in detail the truths which are to be presented. It has been found very satisfactory to have a mimeographed summary of the principal points discussed by the lecturer made and given to the farmers at the beginning or conclusion of the address. Addresses given in this way are certain to receive the closest attention and will be fruitful in their results. This is a most important consideration in making the institute really successful and lastingly beneficial.

The systematic discussion of a single topic by one or more speakers will be found more profitable than the discussion of a variety of subjects. For instance, suppose the subject of feeding silage to live stock is to be considered, and as many as three or four speakers are to be employed at the meeting, let one speaker discuss the crops suitable for the silo and the cost of producing them. A second speaker can then take up the construction and filling of silos, giving definite information showing just what can be done in that particular community in this direction. A third speaker can discuss the feeding of silage to beef cattle from both a scientific and financial point of view with the results obtained. In this way there is a unity of purpose in the entire discussion, and information is provided most beneficial to the citizens of that community and of a kind which they probably could not secure in any other way.

We desire to emphasize the necessity for making the discussions definite in character and for presenting facts relating to the conditions in the community rather than allowing the address to be of a general and indefinite character. It is not difficult to hold the attention of an audience on almost any subject, providing important facts affecting local conditions can be presented. Farmers, for instance, will be more interested in a discussion of the comparative quality and yield of a number of varieties of Irish potatoes than in a most elaborate address on potato growing in general. It is true that this manner of presentation calls for a higher type of lecturer than has frequently been available in the work, but the time is not distant when the institute lecturer will occupy a special field of his own and will utilize in his teaching work more fully than heretofore information which has been accumulated by the various experiment stations, and he may also be in charge of demonstration investigations himself in connection with the State college of agriculture or the experiment station which will enable him to have something valuable of his own discovery to present from year to year. By having competent teachers, thoroughly familiar with all the conditions prevailing within the confines of a given State, it will be possible to have definite object lessons presented suited to the local needs. By discussing subjects on the associated group plan, and varying the subjects discussed in various communities from year to year, a general comprehensive plan of disseminating agricultural information can be worked out which will cover the various agricultural features of the State and have a beneficial influence in every community. For instance, the importance of cooperation on the part of farmers might be made a special theme of discussion for an entire institute, and would be highly profitable if the right kind of instructors were employed.

The support and sympathy of the teachers of the State in the institute work should be secured. They can do much to promote the movement among the men and create interest among the women and children as well. It will not take much time for the institute lecturers on reaching a town to visit the schools and talk to the children for a short period. The little folks, as well as the teachers, will appreciate the mark of attention and frequently become interested enough to attend the institute itself. The great problems in States where instruction in agriculture has been made mandatory in the public schools are to secure sympathy with the subject on the part of the teachers and to furnish in proper form the information necessary for them to have in giving instruction in agriculture to their classes. The institute can aid in solving these problems by bringing the teachers in contact with the State college of agriculture and by inducing them to attend the institution and to equip themselves for their work.

The interest of the county superintendent and the board of education should be had. The winning of their support is of first importance and depends to a considerable degree on personal acquaintance. In a great many counties in the South a number of educational rallies are held every year, which a large number of people attend. In some places these are termed barbecues, basket picnics, etc. Meetings of this character are very valuable as a means of getting new truths before the farmers and of interesting teachers and children in nature and rural life. We think, therefore, that the

institute should have intimate association with the local educational interests of every community, since by so doing it will not only stimulate the local authorities to the adopting of better methods, but will also win support for progress in these directions by the several communities of the State. In other words, we believe that education should be the central idea of the institute work, and that the basis of organization and administration should be so planned as to keep this idea prominent at all times. It is unnecessary to introduce some new and catchy feature in the work each year in order to hold the attention of the farmers of the State. All that is needed is to select valuable truths applicable to the conditions of the communities and present these truths in a forcible way, showing their practical and directly useful character.

As to the length of the institute. Where the institutes are properly programmed and supported, they can be extended from one to three days. In this time associated subjects can be quite fully discussed and suitable illustrative material be shown in demonstration. A much higher type of instruction can be provided in institutes of this special character than by the old many-subject session, and they are more popular with the thinking element of our people. Of course circumstances may make it necessary to continue to hold one-day institutes as a rule, but wherever the time can be extended, it would seem advisable to do so.

The institute should be made a center of information and the director should endeavor to build up a personal correspondence with his clientele. If suitable literature is not available for distribution at the meetings, information should be given as to how it can be obtained and the character of the various publications available. We believe that this feature of the work has not received proper attention, and that a discussion of the use of agricultural literature would often be as beneficial and interesting to an audience of farmers as any other topic. Most farmers have but limited opportunities for knowing which are the best agricultural papers, the kinds of bulletins and reports of their own or other experiment stations, and respecting the literature available by application to the United States Department of Agriculture at Washington. Intelligent reading should be cultivated and can be stimulated by attention to this feature of the institute work.

While exhibit cars, special trains for educational purposes, and other rational means employed for the promotion of the work of the institute are all worthy of encouragement and support, yet the real success of the institute movement will depend on the work which is carefully planned and conducted along more permanent and less sensational lines. The institute work should be organized along serious, comprehensive, and enduring lines. It should be made the basis of a system culminating in the establishment of extension departments in agriculture in all institutions in which they do not now exist. It should be an agency for creating an interest in the cause of agricultural education in every Commonwealth of the Union. The institute, its organization, and the methods by which its work may be rendered more effective should receive more serious attention in the future than has been accorded it in the past. Too often it has been looked upon somewhat as a junketing trip. Inefficient lecturers have sometimes been employed, and the money appropriated has been injudiciously used and no results of real value have been obtained. Where this condition of affairs has prevailed, the institute has fallen into disrepute. The time seems ripe for all those interested in the education of the farmer and the betterment of conditions in the rural districts to see that the institute system of the several States is organized and firmly established on a comprehensive and efficient basis, that the main purpose and object of its work—which is education in agriculture—is kept in view, and that all of its efforts are directed along lines that will best promote this end.

In conclusion, it is only necessary to say that institute work is expensive because of its many ramifications. It must, therefore, be liberally supported to be successful, and it is not necessary that one cent should be used without proper return being secured. There is not a State which could not profitably use at least \$25,000 a year on its institute system. This would make possible the employment of permanent lecturers who could make itinerant teaching their life work. Too often now the institute director is forced to employ men who are not well acquainted with local conditions, and the salaries offered have been such as to prevent men considering the work seriously enough to make it a life vocation. Realizing as we do now that only the best trained men are capable of disseminating the profound truths of agricultural science, is the time not ripe for the more liberal support of our institutes in order that they may best serve the constituency which they are designed to benefit?

J. Bracken, of Saskatchewan, presented a report upon the same subject, as follows:

In Canada and the Northwestern States a great territory, covering so many areas influenced by totally different conditions, there exists at the present time practically

every form of institute organization known, as well as innumerable methods of performing the functions of such institutions. The farmers' institute work in some of the Provinces of Canada and some of the States included in the term "northwestern," has been organized for many years, and at the present time in efficiency and influence compares very favorably with that in the older portions of North America.

The farmers' institute work in Canada and the Northwestern States is carried on under different organizations: (1) As in Manitoba, California, and others of the States, through the agricultural college or experiment station, by the establishment of a college-extension or agricultural-extension department which works in cooperation with farmers' clubs, farmers' institutes, agricultural societies, or other farmers' associations. (2) As in Ontario and several of the States, by the Provincial or State department of agriculture under special legislation, which provides for the organization of farmers' institutes and the sending out of speakers periodically to give addresses and demonstrations. (3) As in Saskatchewan and Alberta, by the Provincial department of agriculture working in cooperation with the local agricultural societies, which societies, besides performing the work of the farmers' institutes, conduct the annual district exhibitions, seed-grain fairs, and competitions in standing fields of seed grain. While under different forms of organization, these agencies have a common function and, although differently designated, are all doing farmers' institute work, as I understand that term.

In the first, the college or agricultural extension plan, the immediate advantage is the possession of trained demonstrators and instructors, which in a comparatively new country is most important. The satisfactory results achieved in Manitoba, where the college men work with the agricultural societies, speak very well indeed for the plan followed.

In the absence of an agricultural college or experiment station the farmers' institute work falls to the Provincial or State department of agriculture, and institute speakers reach the people usually through the local farmers' institute organization or the local agricultural society, the latter having the same object as the former, but with the additional work of the district exhibition. Under this system meetings in newer and unorganized territories are arranged by the department of agriculture where they have reason to believe such are desired.

In having the institute work done by or through the local agricultural society multiplicity of organization is prevented. The disadvantage is the inclination of the agricultural societies to feel that their object has been accomplished when a successful fair or exhibition has been held.

I would like to emphasize the importance of perfect organization and the need of the institute directors cultivating the acquaintance of every member of the local institute executive or agricultural society directorate as far as possible. Without an organization, every detail of which is complete, but indifferent success will come from our efforts, while with concerted action on the part of the local and central organizations, each understanding and fully appreciating the efforts of the other, the greatest good to the greatest number will result. Let the organization be as a great cooperative industrial concern, each and every individual working to make the whole a success, and in return receiving of the profits made possible by "each supporting all and all supporting each." In order to know the needs of the community and to keep in touch with agricultural progress in each, personal contact with the local organizations can not be too strongly urged. A too superficial acquaintance between the director and the local association has injured the effectiveness of our efforts more than we realize and has fostered an attitude of indifference on the part of the local association that means, unless arrested, disaster to our work. We need to cultivate a sympathetic relation with the organization we seek to aid, else indifference will be the attitude of the people toward our efforts.

The methods by which information is carried to the people, or those by which the exchange of ideas is promoted, are many and varied. Those that I shall touch upon have come under my immediate notice, and the number is not meant by any means to cover all that are desirable. These are applicable in comparatively new districts and have worked well in western Canada, a grain-producing country. I am confining myself to this district, since my knowledge of the methods followed in the other Provinces and States is so fragmentary that I can not speak on them with authority.

In Saskatchewan we endeavor to cover the whole territory once a year, usually in the winter months, in the customary way of supplying a sufficient number of well-equipped men to conduct one-day meetings at every point where one is asked for and where we have reason to believe it is desired. We take the trouble to find out, before the campaign commences, what particular subjects are suitable to each locality, and as far as possible endeavor to meet the desires of the people. Two or three men, or two

men and a lady speaker, constitute the staff of each delegation. Meetings are held in the afternoon, and we believe this to be the most profitable time, though evening meetings are given when specially requested.

For the discussions of the problems confronting the grain grower and for aiding in the distribution of a good quality of grain for seeding purposes, special meetings called "seed-grain fairs" are held. These institutions in a grain-producing country we find productive of more good than any others that have been tried. Prizes are given for small amounts of grain, which must be representative of a specified larger amount held in store by the exhibitor. Expert judges are supplied, the grain is judged by score card, and a card showing the judges' figures left in each sample. On this card is also shown the exhibitor's name and the price and amount of seed held by him for sale. Meetings are thoroughly advertised, the buyer and seller meet, and the exchange of a large amount of desirable grain for seed is the result. The judging is always done in the forenoon, and the afternoon is taken up in discussion, led by the judges, on live stock, commercial, and educational problems confronting the grain grower. We have 59 agricultural societies in Saskatchewan, and soon all will make the seed fair an annual event. The Provincial government returns two-thirds of the prize money to the society, and the Federal government furnishes the judges and speakers free of charge.

At the time of the district fair or exhibition, agricultural societies are supplied with expert judges of live stock by the department free of charge. These men are instructed to make their work as educational as possible, and give such recommendations to the directors of each society as they think will better enable it to achieve the desired end. Besides judging live stock, they conduct the stock-judging competitions held by most of the societies on exhibition days.

The demonstrations at our annual district exhibition seem to be productive of good results. In addition to stock judges, trained men are sent to each of the societies requesting their aid, to give demonstrations in live-stock judging, weeds and weed-seed identification, home dairying, milk testing, butter making, and, to a limited extent, cooking. It is our purpose to continue this line of work, since we can reach in this way a very large number of people that otherwise we could not.

As the grain approaches maturity in the fall, trained men are sent out to each agricultural society holding competitions in standing fields of seed grain. These men judge the fields by score card and leave the results with the secretary, where each competitor or other interested party may see them. Large prizes are given by the societies. These are made possible by a grant of \$100 by the Provincial government above that given by the society. These competitions encourage, first, the production of the best, and second, its distribution. This assists the individual farmer of a given district, and at the same time materially increases the quality and quantity of the grain output of the Province.

In those parts of our country where dairying is carried on a traveling dairy is sent out. This consists of a complete butter making, milk testing, and milk separating outfit, in charge of a dairy instructor who, according to the circuit arranged, visits rural points, speaking on dairying and illustrating his talk by actual demonstration.

Seed trains and traveling stock-judging schools have been tried with very favorable results, but owing to the great expense are not found practicable as an annual institution as yet. These trains are fitted up with illustrations of all the valuable results achieved at our experiment stations, and two of the cars are used as lecture rooms. A staff of lecturers is secured and as many as five or six meetings are held in a single day. Only one such train has so far been sent out, but the results of the experiment justify its continuance. The stock-judging schools were moved from one large center to another, but stayed two weeks at each point, giving a regular short course in stock judging, using, for demonstration purposes, typical animals selected from herds of pure-bred stock. This plan was followed by the Alberta department of agriculture last winter, with satisfactory results to the people who attended.

There being no further discussion, the meeting adjourned until 8 p. m.

EVENING SESSION, WEDNESDAY, OCTOBER 23, 1907.

The convention was called to order at 8 p. m., the president, E. A. Burnett, in the chair.

The order of business being the reports of the standing committees, W. C. Latta, of Indiana, presented the following report:

REPORT OF COMMITTEE ON INSTITUTE LECTURERS.

Your committee on farmers' institute lecturers begs to submit the following report:

I. An analytical outline of the qualifications and training of farmers' institute lecturers:

1. His qualifications—

- (a) Good character and good standing in his home community.
- (b) Outstanding success in his special line of work or investigation.
- (c) Ability to instruct wisely, accurately, and effectively.
- (d) Ability to interest his hearers and incite them to accept new truth and adopt better methods.
- (e) Ability to inspire and uplift to a broader and truer view point.
- (f) Personal exemplification, in habits, bearing, speech, dress, and conscious and unconscious influence of what his auditors should become.

2. His message—

- (a) As to its character, true, clear, logical, practical, brief, pointed, convincing.
- (b) As to its scope and range, bearing on the life and work of the farm, the home, the school, the community, upon highways and the conditions and means of sanitary, economic and social improvement and rural betterment in general.

3. His general and special training—

- (a) Preliminary and general: Knowledge, through experience and observation, of all phases of farm life—its hardships and deprivations, its freedom and independence, its healthfulness, beauty, and moral and spiritual uplift; training, both as pupil and teacher, in the rural school; and a working experience in some productive line of agriculture.
- (b) Special: Education at an agricultural college; study of the bulletin and reports of the experiment station; a good general knowledge of mining, manufacturing, and transportation interests in their relations to agriculture; also such special training at a normal institute or other place of instruction as will help the institute lecturer in the preparation and presentation of his message.

4. Sources of supply—

- (a) The farm.
- (b) The experiment station.
- (c) The agricultural college.
- (d) The Government specialist in the Department of Agriculture.
- (e) The class of specialists who are studying sanitary, economic, engineering, statistical or sociological, problems having some bearing upon agriculture.

II. Discussion of some points in the foregoing outline.

Your committee believes that under existing conditions the farm is, and doubtless for some time will remain, the chief source of supply of acceptable and effective farmers' institute lecturers.

There are two good reasons for this view: (1) The stalwart American farmer who has cleaved his way to success from the resources of his own farm is the one who can speak to his brothers with a confidence born of successful experience; (2) the actual everyday successful farmer is the one who can best inspire the rank and file of his fellow-farmers with a confidence that will bear fruit in improved methods and higher success on the farm. The agricultural college graduate who has the personal qualities and qualifications for the work, and who has subsequently added some years of successful experience on the farm, will doubtless in time prove the most effective all-round farmers' institute lecturer.

The experiment-station worker and agricultural college specialist constitute the best farmers' institute lecturers on the scientific and technical phases of agriculture.

There is also an important place in the farmers' institute work for certain specialists whose work has important bearings on agriculture or life on the farm,

For example, the local physician, the lawyer or judge, the county superintendent of schools, secretaries of State boards of health, statistics, charities, and corrections, etc., may all have messages of great value to those who attend the farmers' institutes.

While your committee believes in the value of special training of the farmers' institute lecturer, it is not yet very clear how such training can be secured beyond what is offered at the normal institutes which are now being held in several States.

In presenting this very incomplete report, your committee has had in mind the conditions of the present as they are found in the central West.

What will be the most effective farmers' institute lecturer of the future will, of course, depend upon the character and trend of the farmers' institute work.

W. C. LATTA,
GEO. MCKERROW,
T. L. CALVERT,
Committee.

Discussion of the report by President Burnett and L. R. Taft, W. C. Latta, A. L. Martin, F. H. Rankin, Geo. McKerrow, G. A. Putnam, Tait Butler, and Andrew Elliott, showed that normal courses of study for the institute lecturers are rapidly increasing in number and, in the instances reported, that they have been satisfactory and serviceable in bringing lecturers to a better understanding of their subjects and to a more full appreciation of their need for additional instruction of this same character.

Normal instruction is also becoming less general in its form, and is gradually developing into schools upon special subjects, the students being divided into classes according to their specialties, and then required to devote the major part of their time to the topic which they expect to teach. It is found that this economizes the student's time, and secures for him the precise kind of information that he is to impart in his instruction work.

Discussion by T. L. Calvert, W. C. Latta, George McKerrow, and A. E. Chamberlain emphasized the fact that the ideal institute lecturer unites both scientific knowledge and practical experience in the line of work which he teaches, and that he must have ability to express his views in a convincing and attractive manner. That while a college education does not in itself qualify a man for effective institute teaching, yet when this is combined with a thorough knowledge of the practical operations of a given line of work in its successful prosecution, the college training is of very great advantage if it has been of the right kind.

K. L. Butterfield, of Massachusetts, then presented the following report:

REPORT OF COMMITTEE ON COOPERATION WITH OTHER EDUCATIONAL AGENCIES.

In view of the fact that the standing committee on extension work of the Association of American Agricultural Colleges and Experiment Stations is making a somewhat thorough study of popular forms of agricultural education, and is to include in this study the relation of the farmers' institutes to other phases of popular agricultural education, it seemed advisable for your committee also to give special consideration to this question. It has transpired, however, owing to the short time elapsing between the last two meetings of the Association of American Agricultural Colleges, that their committee was unable to do more than secure a record of the various forms of extension work being carried on by different land-grant colleges. We understand that a more complete investigation is to be made the coming year. For obvious reasons it seemed best that your committee should work closely in harmony with the committee of the college association. We have, therefore, no extensive report to make at this time, but we recommend that your committee for next year be requested to make a full report on this subject at the next meeting of this association, and to confer as far as may be possible with the committee on extension work of the college association during the progress of the investigation and prior to making the report.

In this connection your committee would like to suggest some general considerations that may assist in the formulation of a more complete report:

(1) The work of disseminating agricultural information, or in other words, the popularizing of agricultural education, is a distinct and large field standing out by itself as a legitimate educational endeavor. It is worthy to be compared with the work of agri-

cultural investigation carried on very largely by the Federal Department of Agriculture and by the experiment stations and the work of the agricultural colleges and schools by which instruction in agriculture is given to resident students. We believe that this dissemination work is vital, that it may be thoroughly organized, and that it should be recognized as fully as significant as the other two forms of work.

(2) Careful study should be given to the relation of extension teaching (which may be considered as that form of dissemination work carried on immediately through the agency of the agricultural colleges and schools or the experiment stations) and other forms of dissemination work performed by State boards of agriculture, by various farmers' organizations and societies, by the agricultural press, etc. There is no doubt that the agricultural colleges have a legitimate field here; so have these other institutions. We think it worth while that a somewhat careful study should be made of the relationship that should exist between the two types of work, namely, the extension teaching of the agricultural colleges and dissemination work of other agencies.

(3) There should also be a study of the precise field which farmers' institutes may attempt to occupy, whether they are conducted immediately by the agricultural college as a part of its extension teaching, or whether they are conducted by State boards as a part of their general dissemination work. We are inclined to think that the time has arrived when the farmers' institute should be somewhat carefully defined and its precise function pretty fully understood. A number of land-grant colleges have already established departments or divisions of extension teaching in agriculture and others are planning for such organization. In those cases where the institute work is also carried on by the agricultural college the problem of the relation of the institute to other forms of extension teaching will probably have to be worked out in accordance with local needs and practices, although even here we think it would be well for your committee to consider very carefully the ideal relationship that should exist. About one-third of the States conduct their institutes through other auspices than those of the agricultural college. In these cases it becomes particularly important that the relation existing between the farmers' institutes and the extension work of the agricultural college shall be defined and a proper method of hearty cooperation inaugurated and maintained.

K. L. BUTTERFIELD,
HUBERT VREELAND,
TAIT BUTLER,

Committee.

DISCUSSION.

TAIT BUTLER, of North Carolina. We have heard used here quite frequently the terms "farmers' institute" and "agricultural extension." The gentlemen have used them as if they were distinct and separate terms. I find that in some places where they say they are doing agricultural extension work it is what I would call farmers' institute work, and that in other places the farmers' institute men are doing what I think is extension work.

T. F. HUNT, of Pennsylvania. There are three things that the people in this audience are interested in doing for the purpose of uplifting and helping country life. The first is research; the second, education; and the third, the execution and enforcement of laws.

Agricultural colleges have no patent on education. Nor has any other institution. There are many agencies of education and one of them is the farmers' institute. So far as this discussion is concerned it is a matter of indifference whether that agency happens to be located in a State department of agriculture or at a State agricultural college.

The word "extension" is a university term, signifying a form of education beyond the college or university campus. That work has taken a good many different forms. Sometimes it is lecturing at farmers' institutes; sometimes it is lecturing before civic clubs and conventions; and sometimes it is correspondence work. There are many forms of extension work, and there are many forms of agricultural extension work. The farmers' institute is one form. The point I wish to make is that the term agricultural extension is a great deal more inclusive than the term farmers' institute. An agricultural institution may have a department of agricultural extension and not be within a thousand miles of a farmers' institute because there are plenty of other fields,

K. L. BUTTERFIELD. I think it can be demonstrated that there is work for all of the different agencies now in existence by dividing this field up among them. In education, for instance, we have organized institutions in the form of agricultural colleges and schools which provide instruction for resident students, but we find that for a hundred years in this country there have been other agencies, as live stock, dairy, horticultural, and other associations, at work distributing the best information of the day regarding agricultural subjects to the actual tillers of the soil. This divides the work into at least two kinds, one performed by institutions to resident students and the other to people not resident. Among the latter agencies is the farmers' institute. Now it happens that in two-thirds of our States the farmers' institute is distinctively a part, and in most cases all, of the extension work carried on by the colleges. Is the farmers' institute of the future to be recognized as meaning gatherings of farmers brought together to be taught so far as possible by the better farmers, or are we to think of it as an agency, a sort of institute like a board of agriculture, like a college which shall not only carry on these meetings which we know as farmers' institutes, but shall also take up lines of extension work in addition to the typical institute meeting? These are problems that confront us, and to their solution the committee on cooperation with other educational agencies is devoting its efforts.

G. C. Creelman, of Ontario, then presented the following report:

REPORT OF COMMITTEE ON MOVABLE SCHOOLS OF AGRICULTURE.

This committee's report will be very short, for a very good reason. Two years ago Mr. Hamilton gave us a paper on Movable Schools such as we had not had any conception of before. He had corresponded with European countries, and had also selected the best methods of this country, and had put the material into such form that this association thought it worth while to pass a resolution asking that the paper be incorporated in the report of proceedings, and it was so published. Last year Mr. Hamilton was continued by the executive committee as chairman of the committee on movable schools, and he presented a most excellent and concise report on what the Department of Agriculture was doing. The Department at that time was preparing six courses of study for movable school work. Some of these courses have been prepared and sent out since that time. When I as chairman of the committee tried early in the year to make researches along that line I found it absolutely impossible to prepare anything for this meeting.

G. C. CREELMAN,
A. L. MARTIN,
F. E. DAWLEY,
Committee.

DISCUSSION.

A. L. MARTIN, of Pennsylvania. It is safe to say that what is known as a movable school in agriculture is not out of its experimental stage in this country. Last year we held one meeting that partook of the character of a movable school in which some of the lines of dairying were taken up, as the testing of milk, ripening cream, churning and scoring butter. The interest in this meeting was quite encouraging, so much so that for the coming year we have already scheduled three meetings of this character, each meeting to continue for not less than six days, taking up in this work three distinct lines of agriculture—dairying, horticulture, and the poultry industry. Our plan of procedure has been, first, to get complete syllabi of the subjects to be taken up in these schools of agriculture. A syllabus, for instance, is prepared along the line of feeding dairy animals and sent to the locality where the school is to be held. Before a meeting of this kind is undertaken, the local management must prepare and send to the Department a list of persons who have signed a statement declaring that they will attend all the meetings of this school for the week. After this list is received the syllabus is forwarded to every member of that class at least six weeks previous to the meeting, so that there may be ample time to study up questions embraced by the syllabus.

We have arranged, as I have said, for three of these schools to be held within the next six or seven weeks. By another year we hope to have the system more fully outlined and extended.

I have heard some intimation that possibly the work in farmers' institutes will wear out some day. I want to say that so long as man lives upon the earth he will till the soil, and so long as he tills the soil there will be problems to be solved. There will be work enough in agriculture for the chemist, for the bacteriologist, and for scientists of all kinds to study through all time to come, and there will be work enough during that period for the farmers' institutes in presenting the truths which these scientists discover to the farmers of the State. There should be no contention as to what agency shall carry it on. The work is extensive enough and difficult enough to require the cooperation and best efforts of all who desire to secure better conditions in country life. The agricultural college, the agricultural experiment station, and the farmers' institute should work hand in hand in this, the greatest educational work of our time.

TAIT BUTLER. I can not see the difference between the short courses and the movable schools.

P. G. HOLDEN. The system described is very similar to that carried out in what are called in Iowa "short courses." This term came from our course at Ames which was called a short course in corn judging and stock judging, and it naturally followed these schools as they went out into different sections of the State. We call them corn, stock judging, and domestic science schools, because they are names that the people are familiar with. Nothing, perhaps, has done more to stimulate the work of the farmers' institute and to popularize the work of the college than these short courses or movable schools.

The convention adjourned until 9 a. m. Thursday.

MORNING SESSION, THURSDAY, OCTOBER 24, 1907.

The convention was called to order at 9 o'clock a. m., the president, E. A. Burnett, in the chair. The hearing of reports of standing committees was continued.

L. R. Taft, of Michigan, presented the following report:

REPORT OF COMMITTEE ON BOYS' AND GIRLS' INSTITUTES.

The importance of interesting the boys and girls of the rural districts in the farmers' institutes is very generally admitted, and the questions that naturally arise are, "What can be done?" and "How shall we go about it?"

As yet very little has been done in this line, but the work has been taken up in a number of the States.

The following are among the replies received to letters sent to the directors of institutes in States in which it was thought something had been done in this line:

"Canada: We have no institutes for boys and girls. At some of the women's institute meetings the school children have been invited to attend, and the instruction given by the lecturer has been of interest, not only to the fathers and mothers but also to the boys and girls. In a few instances the boys have been asked to attend the judging classes held in connection with the farmers' institute meetings. We really have no institutes for boys and girls. I believe, however, that much good can be accomplished by devoting more attention to the young men and women and to the boys and girls.—G. A. Putnam, superintendent.

"Illinois: We have never held what would properly be called 'Boys' and girls' institutes.' In many of our regular institutes, however, it is quite common to devote a session to the interests of the young people. Indeed, we shall hold a three-day meeting this week in which one entire day will be devoted to the boys and girls. You will observe from the programme I send you that the leading teachers and the assistant superintendent of schools are to give addresses.—Frank H. Hall, superintendent.

"(The programme for the day consisted of classes in corn judging and bread judging, a report on two weeks' course at Champaign, and four addresses, one of which was on 'The boy problem,' and the others, although no subjects were given, were evidently upon educational topics).

"Indiana: The most important work in Indiana has been in the way of some form of contest, like a corn-growing contest, competitive exhibit, or competitive judging. One county has raised \$1,000 for the corn-growing contest, and considerable sums have been raised in other counties for a similar purpose. Less has been done thus far to encourage the girls. In a few instances they have joined in the corn-growing contest and been successful competitors. In others they have enlisted in a bread contest, a butter contest, or something in that line. I presume we shall have sewing contests the coming winter, but nothing very definite has been done in that line as yet.—W. C. Latta, superintendent.

"Nebraska: For the past two seasons the State department of public instruction has cooperated with the university in carrying on the work of the boys' and girls' institutes. They have charge of the organization, and we have charge of publications, lecturers, and judges. Organizations of boys and girls have been formed in thirty counties, and twenty-six contests will be held this fall. In cases where it is possible to do so, the boys' and girls' institutes will be held in connection with the regular farmers' institutes. The boys are working with corn alone this season. The girls will exhibit bread and aprons. Over four thousand boys have taken up this work, and nearly an equal number of girls. Two bulletins have been sent out this summer to aid the boys in their work on corn. The first bulletin was on planting corn. This bulletin also contained the general plan of organization for county and State contests. The second bulletin is on corn culture, and a third is now ready for the press, entitled 'Selecting corn for the contest.' This bulletin also includes the plans for conducting the county contests both for boys and girls, and also the programme for the State contest to come this winter. The work is outgrowing the appropriation allowed for such work.

"New York: We have given the boys and girls one period at one of the sessions of the institute, making the work particularly attractive to them. We call this session the 'Children's hour,' and send speakers who have been particularly successful in interesting the children. We do not have long addresses, sometimes as many as four different speakers appearing during the hour, together with one or two recitations and some music furnished by the children. Among the subjects which we have taken up are, 'The boy's calf,' 'The boy's colt,' 'What came from the cosset pig,' 'Poultry keeping for children,' 'The flower garden,' taking pains in each address not only to give instruction in relation to the matters under discussion, but to endeavor to inculcate some principles toward increasing the appreciation of country life in the children. To say that these sessions have been well attended and interesting would be putting it mildly. Correspondence which we have received at this office after the institutes shows that good seed has been sown. The greatest difficulty in handling this kind of work has been to get speakers who appealed to the children, and when we have found such a one the success has been marked.—F. E. Dawley, Superintendent.

"Michigan: For several years, although no special institutes have been held for boys and girls, an endeavor has been made to interest them in rural life. Various contests and exhibitions have been held, and at least a portion of one session has been devoted to topics designed for them. This is generally a part of the evening session, when the audience is not uncommonly one-third to one-half of young people, although the latter part of the afternoon session is often planned for them as well. In some cases an entire day has been given up to them when the meeting lasts three days. During the runs of the institute trains, in places where the schools have been dismissed, the boys and girls are taken by themselves either into one of the coaches or into the baggage cars, and special talks and demonstrations on such subjects as grafting, pruning, milk testing, poultry raising, plant growth, and seed selections, are given. Such other topics as 'Movement of water in the soil,' 'Movement of water in plants,' 'Chemistry of common things,' 'Farming for boys,' 'Our boys and girls,' and 'The farmer of to-morrow,' are on the programme at nearly all of the county institutes. The schools, in many places, are dismissed at least for a portion of the afternoon, and the older scholars are required to write a report of the meeting as a part of their work on English. The older girls often attend the woman's section. There is very hearty cooperation between the farmers' institutes and the State department of public instruction, and between the county institute management and the county commissioners of schools and the local superintendents and principals. Lectures upon 'The agricultural college and its work,' often illustrated with the stereopticon, are given at many of the institutes."

In most of the States where contests are carried on the boys are required to write reports of their work, and those who receive the prizes are expected to read them at the institute.

While there is something of a similarity in the work that has been done in the different States, it is evident that the methods are varied according to circumstances. If this is true in one State, it would apply with even greater force when an attempt is made to utilize the experience that has been obtained in one State in another where the conditions are still more unlike.

It is the opinion of your committee that some work likely to interest the boys and girls should be taken up in all States where it can possibly be arranged. Nothing seems more generally successful as a starter than competitive exhibits, such as corn, wheat, oats, melons, potatoes, and poultry, to be produced by boys under 17 or 18 years of age, or of bread of various kinds, butter, and poultry, by girls of the same age. Exhibits of sewing and needlework could also be made by the girls. Suitable prizes could readily be obtained for such exhibits. They could not only be shown at the local and State institutes but at local and State fairs.

In addition to the reports and essays which should accompany the exhibits, the older boys should be encouraged to prepare papers giving the methods used in the growing of some crop or animal, in which they had a part, and the girls could do the same regarding some of their household duties.

Just how much time can be devoted in the programme to the boys and girls will have to be determined for each institute, but even in the one-day meetings it should be possible to give them one hour, particularly if there is an evening session. Considerably more than this could be allotted them in the two-day meetings, and there are many points where an entire day could be used to advantage for topics intended primarily for boys and girls, by having a three-day institute.

While some speakers could make any topic interesting to every one, whether young or old, there are some subjects that seem particularly adapted to young people. Among them are elementary science talks on botany, chemistry, physics, and entomology; regarding the diseases of animals and plants, and the methods of fighting them. In addition to the above and the many cultural topics that might be introduced, we should not forget to bring out the splendid prospect that agriculture offers to young men to-day, and the even greater prospects in the future, as well as the many advantages of rural life.

We believe that such institute work for the boys and girls as we have outlined will not only be likely to help in keeping the boys and girls on the farm, and, at the same time, to advance their welfare and that of the agricultural interests of the country, but that it will add to the interest of the general public in the institutes and, by increasing the attendance, greatly enhance the benefit that will be derived from them.

L. R. TAFT,
H. T. FRENCH,
J. W. CARSON,
Committee.

DISCUSSION.

G. A. PUTNAM, of Ontario. In Ontario, while we from the department have not done much to encourage educational work, especially for boys and girls, many of the women's institutes have taken it up in a practical way. They arrange for the work at the monthly meetings to be taken charge of by the young girls in the community. Each brings a sample of something made or baked by herself, and she is expected to explain how the cake, or the bread, or the fancy work was made. This has created an interest on the part of the young people until many of the institutes have doubled their membership, and has also made the work of greater interest to the older people. There is unlimited work in this line. In fact, if the institutes devoted all their efforts for a year or two to educating the young people, I am inclined to think that it would be as good work as they are doing now or better.

W. C. LATTA, of Indiana. A man in northwestern Indiana has offered a considerable prize in the way of a trophy cup which is to be presented to the Corn Growers' Association, and by this association to the champion exhibitor of corn from year to year, not to remain his property, but to be given again and again. We are seeking in Indiana to interest the county superintendents of schools definitely in this work. I think I may say that in four-fifths of the counties the relation between the chairman and the superintendents is a very cordial one. In half of the counties there is more or less

cooperation, and in one-fourth there is effective cooperation along that line. We are after the boys and girls rather than the young men and women, and we believe that with the cooperation of the school people and the farmers' institute people we will accomplish two good things—we will get hold of the boys and girls, and their interest will have a reflex on the associations themselves.

VAL KEYSER, of Nebraska. In Nebraska we have 4,000 boys in these corn contests. They seem to go into it just to get the prize money. Something should be done to arouse an interest and pride in their work so that we would not have to spend so much time in raising this prize money. There is no appropriation for this purpose although we are asking the legislature for \$5,000 for next year.

We have found that it is a mistake to try to mix the boys and girls' programme with that of the older people, so we have insisted this year that a separate session be set aside for the boys and girls with a distinct programme of their own.

W. C. LATTA. In Indiana we are changing the corn-growing contests into educative rather than competitive contests. We supply the contestants with literature from the college bearing on the subject. Whoever conducts the contest examines them orally upon what they have read. The reading is rated at 50 per cent—25 per cent on the sample of corn, and 25 per cent on their ability to pass the oral examination.

The reports of the standing committees having been concluded, the association took up the consideration of subjects assigned by the programme to various speakers for discussion. The first paper was by Dick J. Crosby, U. S. Department of Agriculture, upon:

COURSES OF STUDY IN AGRICULTURE IN INSTITUTES.

To carry information concerning the farm and its problems to the farmer in his home town has been the avowed object of the farmers' institute these thirty years or more. The great problem of the farmers' institute manager or director has been how to convey this information in such form or in such manner that the farmer would assimilate it in quantities sufficiently large to produce an appreciable effect on farm practice.

We recognize three stages in the development of the farmers' institute: (1) The entertainment stage, (2) the information stage, and (3) the instruction stage. The instruction stage is the one I have been asked to discuss, and in order that we may clear the way for this discussion it would be well first to distinguish as clearly as we may the difference between information and instruction. The two words convey the common idea of communicating knowledge, but information is applicable to matters of general interest, while instruction is particular and personal.

"We may inform ourselves or others on anything which is a subject of inquiry or curiosity, and the information serves either to amuse or improve the mind. To instruct is applicable to matters of serious concern or to that which is practically useful; it serves to set us right in the path of life."^a

Information fills the mind, instruction develops it; in receiving the former the mind is passive; in acquiring the latter it is active.

The difference also extends to the man or other agency engaged in conveying information or imparting instruction. Truth, sincerity, and ability to tell a plausible story are all that is necessary for the informant, but for the instructor general experience, a perfect knowledge of the subject in question and ability to inspire immediate and continued effort on the part of the pupil are requisite.

Instruction and instructors are coming more and more to be demanded in the agricultural extension work. Information giving and informants pure and simple are still recognized as useful and necessary features of the work, but their function will continue to be that of pioneers, to give inspiration and otherwise prepare the way for the more serious work of the practical man who is also a trained instructor, and for the institute course in agriculture, or the movable school of agriculture.

The movable school of agriculture has not been given extended trial in this country but in Europe it is featured by every country that devotes funds to agricultural education. Furthermore, in the United States its prototype, the winter short course, has stood the test of several years and established its right to a place in our system of technical instruction. If we consider the essential features of this course, I think we shall be able to arrive at a reasonable programme for courses of study in agriculture for the

^a Crabb's English Synonyms, p. 421.

farmers' institutes. In the first place it extends over a period of one or more weeks, thus giving from five to ten or more times as many hours as the ordinary farmers' institute for the consideration of the problems in hand. Secondly, it is usually devoted to one phase of agricultural production—one farm product, like corn, or potatoes, or butter, or poultry—with correlated work on closely allied topics. And finally, it embraces many demonstrations and some practicums in which the students participate.

These should all be features of the traveling school of agriculture, or the farmers' institute in which it is proposed to introduce courses of instruction in agriculture. Such an institute should extend over five days at least. It should be long enough to consider all practical phases of the limited subject under discussion. There should be a faculty of three to five trained instructors, but all lectures should be directly related to the main topic of the institute. Furthermore, the instruction should be clinched at every possible point by having the students engage in practicums arranged to allow them to demonstrate to the satisfaction of the instructors their grasp of the instruction.

Such an institute will require an equipment consisting not only of collections and material to illustrate the lectures, but also of material, apparatus, and machinery for the students to handle and manipulate. Such equipment would in many cases be expensive, but when funds are meager there would seldom be difficulty in getting responsible manufacturers to donate their machinery without cost to the institute management.

To serve as a basis for the discussion of this topic I have outlined a tentative course on potato culture, and arranged the following daily schedule:

Daily schedule for an institute course in potato culture.

	Utilization of crop.	The potato.	Insect pests and diseases.	Potato soils and fertilizers.	Practicums.	Demonstrations.
	8 to 9 a.m.	9 to 10 a.m.	10 to 11 a.m.	11 a.m. to 12 m.	1 to 2.30 p.m.	3 to 4.30 p.m.
Monday....	A. Opening exercises.	B. Potato and its relatives—history.	C. Diseases and how to prevent them.	C. Characteristics of good potato soil.	C. Identifying and treating seed; identifying late blight in seed.	C. Physical characteristics of potato soils.
Tuesday....	A. Composition and use as food.	B. Improvement and development of new varieties.	C. Insect pests and how to combat them.	C. Preparation of seed bed.	B. Selecting seed; identifying varieties; cutting seed.	C. Demonstration of hand and power spraying machinery.
Wednesday	A. Uses for other purposes than food.	B. Methods of selecting and planting.	C. Spraying mixtures; how and when to prepare and apply.	C. Irrigation and drainage.	C. Mixing spray solutions; using spray machinery.	B. Hand and horse planters.
Thursday....	A. Chief production areas and markets.	B. Cultivating and harvesting.	B. The potato as a main crop.	C. Maintenance of soil fertility.	A. Studying maps of potato production.	B. Cultivators and diggers.
Friday	A. Interpretation of market quotations.	B. Storing and marketing.	B. The potato as one crop in different rotations.	C. Demonstration: Home mixing of commercial fertilizers.	A. Studying market quotations and interpreting Government reports.	

The division of the work among the different lecturers is shown in the following list:

LIST OF LECTURES.

(A) Conductor and lecturer on the utilization of the potato crop.

Lectures:

- (1) Composition of the potato and its uses as food.
- (2) Disposal of potatoes not marketable for food by—
 - (a) feeding to animals,
 - (b) manufacturing into starch, potato flour, alcohol, etc.
- (3) Chief production areas and leading markets.
- (4) How to interpret market quotations and how and when to dispose of crop. Commission merchants v. local buyers.

Practicums:

- (1) Study of maps showing chief centers of potato production.
- (2) Study of market quotations and interpretation of Government crop reports.

(B) Lecturer on the potato in relation to other crops.

Lectures:

- (1) The potato as a main crop—what other crops should intervene between potato crops.
- (2) The potato as one crop in different general cropping systems.

(B) Lecturer on the potato.

Lectures:

- (1) The potato and its relatives—history.
- (2) Improvement by selection and by originating new varieties from seed.
- (3) Methods of selecting and planting seed potatoes.
- (4) Cultivating and harvesting.
- (5) Storing and marketing.

Practicum:

- (1) Selecting potatoes for seed, identifying varieties, cutting potatoes for planting.

Demonstrations:

- (1) Demonstration of potato planters—hand planters and horse planters.
- (2) Demonstration of cultivators and diggers.

(C) Lecturer on insect pests and diseases of the potato.

Lectures:

- (1) Diseases and how to prevent them.
- (2) Leading insect pests and how to combat them.
- (3) Spraying mixtures—how to prepare and how and when to apply.

Practicums:

- (1) Identifying potato scab and treating seed for scab; identifying late blight in seed potatoes.
- (2) Mixing spray solutions and manipulating spraying machinery.

Demonstration:

- (1) Demonstration of hand and power spraying machinery.

(C) Lecturer on potato soils and fertilizers.

Lectures:

- (1) Characteristics, physical and chemical, of a good potato soil.
- (2) Preparation of seed bed.
- (3) Irrigation and drainage.
- (4) Maintenance of soil fertility—use of commercial fertilizers, barnyard manure, and green manures.

Demonstrations:

- (1) Typical potato soils and their physical characteristics as compared with other soils.
- (2) Home mixing of commercial fertilizers.

I have arranged for a five-day institute, with lecture periods running from 8 a. m. to noon, practicum periods from 1 to 2.30 p. m., and demonstration periods from 3 to 4.30 p. m. There might also be two or three instructive and entertaining evening lectures.

Five series of lectures are suggested: (1) A series of five lectures on The Potato, (2) two lectures on The Potato in Relation to Other Crops (Thursday and Friday from 10 to 11), (3) four lectures on Potato Soils and Fertilizers, (4) three lectures on Insect Pests and Diseases of the Potato, and (5) four lectures on The Utilization of the Potato Crop. There are also five practicums and five demonstrations.

Under ideal conditions we would probably have five lecturers to carry on the work in such an institute, but we have not yet specialized so far in all sections of the country but that we may find plenty of men broad enough to lecture on two or even more of these main topics. Three lecturers ought to carry this work easily. To Mr. A, the conductor, selected because of his broad view of the whole field, we will give four lectures on The Utilization of the Potato Crop and the study of markets, which, with the opening exercises, two practicums, one evening lecture, and the responsibility of management, will be enough for one man. To Mr. B we allot five lectures on The Potato, two lectures on The Potato in Relation to Other Crops, one practicum, and two demonstrations, an average of two exercises a day. To Mr. C we give soils, fertilizers, diseases, and insect pests—seven lectures, two practicums, and three demonstrations, an average of two and two-fifths exercises a day. This is somewhat heavier work than we gave to Mr. B, but if we give B an extra evening lecture, I think we shall about equalize the work. I am satisfied that in some localities we shall want to divide the work now given to C and have one specialist for soils and fertilizers and one for insects and diseases, but for our present purpose the above arrangement will answer.

The practicums and demonstrations are fully as important as any other feature of the work. The men we come in contact with in institute work, while many of them read intelligently, are accustomed to get much of their information by ocular demonstration and by manual experience. We may tell them very clearly, for example, how to mix spraying solutions, explain to them the workings of the spray pump, and perform the various operations before their eyes, and yet they will feel surer of their information if they have an opportunity to do the things we have been talking about and doing. The demonstration and the practicum are necessary to clinch the instruction of the lecturer.

Just a word as to the best methods for organizing and conducting these institute courses in agriculture. There is no best method at present applicable to the varying conditions found in the different States. The ideal method will be perfectly apparent when we have in each State agricultural college a well-organized and thoroughly equipped extension department. There will be a dean of the extension department with directors under him having the rank of full professors, in charge of farmers' institutes, demonstrations, school work in agriculture, etc., and each of these will have a corps of expert assistants. The director of farmers' institutes will have a force of men capable of conducting institutes and some of the experts needed for the lectures and demonstrations. His work will be in full swing when the work of the demonstration force is slack, and vice versa. He will thus be able to exchange with the director of demonstrations, and in this way the work of both divisions will be facilitated. Until such extension departments are developed the organization of the institute courses in agriculture must of necessity be more or less of a makeshift.

And yet, even under present conditions, much can be accomplished along the lines outlined. A force consisting of two conductors and six or eight lecturers will be able to hold 24 five-day institutes in the months of December, January, and February. These men should be on the regular institute force and should be chosen for their known ability to do well the things they talk about and to talk well about the things they do. They should be both experts and instructors. In many cases the colleges will be able to furnish several of these men. I do not think that such institutes should be undertaken without the cordial and hearty cooperation both of the agricultural college and of local institute associations or other responsible local organizations. Let the people know that you have the facilities and the inclination to hold institute schools and then wait for an urgent invitation. Experience has shown that you will not have long to wait. After the people have convinced themselves and you that they are in dire need of one of these institutes, have them guarantee a regular attendance of, say, 50 students and a suitable building heated and lighted. Then it will be time for you to act. Remember, this is not a one-day inspiration institute for the unstable class of farmers, but an institute school for the men who stick to a definite course.

The course I have outlined is not ideal, nor is it entirely imaginary. A very successful institute of this kind was held under the auspices of the Colorado Agricultural College, at Delta, last winter. Delta is a fruit region, and they wanted a fruit school. The local men guaranteed an enrollment of 50 and got out 112. The professor of horticulture went to Delta with 12 instructors and kept school six hours a day for six days, besides having four evening lectures and a reception. There was also a women's course with 75 enrolled. They had lectures on soils, insects, diseases, orchards, nursery stock—all phases of the fruit growers' problem of that section, and practicums in judging fruit, mixing spray solutions, using spray machinery, pruning, and grafting.

Professor Paddock, who was in charge of the course, says:

"The entire week was marked by a spirit of interest, enthusiasm, and good nature which the writer has never seen equaled.

"As is usually the case, successful orchard men more generally attended the course than others. Men who have received eight and ten hundred dollars gross from an acre of apple orchard were heard to say that the instruction meant the saving of a great many dollars to them. One man who is developing a number of orchards, intends to send his men to the school next year and to pay all their expenses, believing that the knowledge they will thus gain will repay him many times. A movement is already on foot to make the school at Delta a permanent annual event, and the people in charge have set the date for the next school at 10 o'clock, Monday morning, January 13, 1908."

They are planning twelve such institutes in Colorado next winter and will practically abandon the ordinary institute. Utah has caught the infection and will hold about sixteen institute schools; Pennsylvania will put a number of traveling schools in the field; Iowa has held successful short courses at a number of places; Nebraska will try one institute school this year, and probably others will fall in line.

The institute course in agriculture has come to stay. It is a step forward and upward in the progress of agricultural education. It combines "training of the mind, so that the hand shall manipulate with accuracy, the eye shall see with accuracy, the mind shall think with accuracy, and all the powers of brain, eye, and hand shall work in unison to increase and enlarge the productive capacity of the earth, to cheapen the means of subsistence, and thus to give man more leisure."

DISCUSSION BY ALVA AGEE, OF PENNSYLVANIA.

In an early day in Ohio some of us believed that the farmers' institute was only a passing show—a revival movement that would run its course and cease. We failed to see that a new science was building rapidly, thanks to station and college workers, and that agriculture must employ it. We underestimated the tremendous value of all that was being learned about the laws governing in the realm of agriculture. If this knowledge had been something less than fundamental our agricultural colleges might have dealt directly with all persons requiring acquaintance with it. As it is there had to be means of widespread popular presentation of agricultural truth, and the institute can not be destroyed even by the inefficiency of those of us who do the lecturing. The farmers will remain hopeful and continue to winnow, for their need is great. Some progressive men in some communities may withdraw their support because they are in advance of some lecturers, and this is a warning to be heeded; but there will remain a great mass of farmers who can be helped by those of us who are available for institute work. The extent of withdrawal of support depends upon the degree of inefficiency of the institutes. This is a trite observation, but it leads the way of approach to my subject and may be welcomed on that account.

The agricultural college in its regular four years' course can serve directly only a very small percentage of our people. In Pennsylvania we sought to widen contact by the establishment of the special two years' courses. This was acting in the right direction, but still the number of men personally touched necessarily remains small. The next move at State College was the establishment of the twelve weeks' winter courses, but when we secure the thousands we expect the number will be small in comparison with the number needing instruction. The masses must have a still shorter course of instruction with the benefit of personal contact with teachers and without the expense of traveling to a central institution. Here is the opportunity of the farmers' institutes.

It is difficult to discuss the subject in a helpful way without taking into account the limitations of the institute lecture force. The one thing most needed the country over is men who know things that are worth while and who have the gift of effective presentation. There is huge lack of men to man the institute schools, and the lack will grow in importance as the effort to establish institute schools increases. I have no patience with the critics of our farmer' institutes. Directors are using the best material available, and can do no more. As lecturers we have sad limitations, but directors must use us until a more capable lot are trained. These schools can

not be supplied where needed until the force of capable instructors is at least doubled. Why will not young men awake to the demand of the hour and fit themselves for scientific agricultural instructors? If thousands were available, they would find places. Institute systems would grow in comprehensiveness of plan if there were men to fill the places.

What should the course in an institute school embrace? We do well to get away from the idea that a liberal industrial education can be acquired in a week or two. A week's course should embrace only one or two subjects or phases of a subject, and the instructor should get down to underlying principles. My personal experience is limited. There are some farmers in a valley of one of our Eastern States that are studious. One of their interests is soil building, another interest is live stock. About five years ago they asked, through a resident member of their State board of agriculture, that Dr. H. P. Miller, of Ohio, and I conduct a farm school for a week. They came into the county town—about fifty of them—for the week, and business began. When bearded men go to town for a week and pay good money for poor board all for the sake of instruction, the instructors should furnish facts or leave town. Our gestures and glittering generalities were neglected in that company. I never worked harder in my life. It was an interesting week. Those men were interested in propounding their problems, and we were interested in keeping one jump ahead of them. Candidly, it is my impression that more instruction was imparted by the lecturers that week than in several times as many weeks in ordinary institute work with mixed audiences and mixed programmes. My friend, W. D. Zinn, who was the resident member of that county, says that some of the things taught that week are believed to this day in that community, and that is a test that is worth while in this age when scientists can not agree about simple phases of soil fertility problems.

Respecting the subjects studied in an institute school: The programme of a farmers' institute as usually conducted is an appeal for attendance. Numbers count. The effort, unconscious as it often may be, is to secure popularity for the institute as evidenced in figures of attendance. The programme which lends itself to such service touches upon a wide variety of farm interests. The institute school should make efficiency the single test, and efficiency in instruction continuing only a week or two demands concentration upon a few points. There should be no effort to attract any one outside of the number engaged in some one special interest, or it may be, two. That interest may well be the leading one of the section. The patient cow has lent herself so finely to catchy statement and showy demonstration that dairy teaching is the first impulse of a director who contemplates the establishment of a school. Far too little has been done along the dairy line, and yet that which has been done is greatly out of proportion to the presentation of truth concerning other farm interests. The acres of land supporting cows in the United Sates form a small area in comparison with the country as a whole. If there is no way of engaging men in close study of anything except a cow or a hen, the usefulness of the institute school to American agriculture is pitifully narrow.

Institute schools will be popular when teachers can be secured. A man who owns land and is dependent upon it for income will welcome any teacher who knows things. Faith in the science of agriculture has grown about as rapidly as the science has grown. If a man actually knew about soil fertility he could have a following of a million farmers in this country within five years. Uncertainty concerning vital points keeps the masses conservative and doubtful of our new science, but public confidence in our science is growing because our science is growing. I turn back to a statement made earlier in this paper and give it the emphasis of a closing remark: The limitations of the usefulness of institute schools is measured only by the shortage of teachers. If there were a thousand efficient men for this work, a thousand opportunities would spring up in schools variously organized under the various directors,

but every one supported by farmers who would have faith because men who knew things were offering instruction that could be converted into cash out in the stable, orchard, and field.

C. A. Zavitz, of Ontario, presented the following paper:

FIELD DEMONSTRATION WORK.

It seems difficult for us to realize that it is only about sixty years since the establishment of the first experiment stations for the investigation of agricultural problems. It was about the middle of the last century that Sir J. B. Lawes in a private capacity in England and a little group of farmers in an organized capacity in Germany started the experiment-station movement, which has been almost marvelous in its development and has been far-reaching in its results. At the present time there are about 800 experiment-stations in existence. Those countries are few which can not boast of their organizations for experiment and research work along the lines of agriculture. It is certainly true that these organizations vary greatly in the extent of their work, in the variety of their investigations, and in their methods of operation. The great object, however, in the experiment-station movement throughout the world is to help in the development and in the progress of agriculture. Through the aid of organization and of Government support many exceedingly important lines of investigation are being successfully conducted by united effort, which it would have been practically impossible to have undertaken by the individual efforts of the people who are engaged in agricultural pursuits. The experiment stations are endeavoring, by the aid of chemistry, botany, bacteriology, and the other sciences, to better understand the underlying principles of agriculture. Not only are they making use of the scientific knowledge obtained in past ages, but through their skillfully arranged and carefully conducted experiments and investigations they are now actually helping to enrich and to give a deeper meaning to the study of science itself. It will therefore be seen that this great work is destined to wield an immense influence on agricultural methods and on our knowledge of the fundamental principles of agriculture. I believe the time is fast approaching when the experiment station, with its cooperative work throughout the country, will be the chief source of information, not only for the farmer himself, but also for the agricultural college professor, the institute speaker, and the agricultural writer.

The work of some of the stations is conducted almost entirely in the laboratory, that of others is extended to the field, to the garden, and to the stable, and that of still others, besides being conducted in the laboratory and on the station farm, is extended to the very homes of the farmers themselves. Each of these types of work has its advantages and its disadvantages. The first enables the station men to more fully concentrate their energies along the line of definite scientific research work, while the last exerts a much greater influence upon the agriculture of the community. I believe that the experiment station must be not only the chief source of our knowledge along the lines of advanced agriculture, but also the fountain head from which is obtained the material and the directing power of the experimental work conducted throughout the agricultural communities, whether under the name of field demonstration work, cooperative experimental work, or experiment-station extension work. The word "demonstration" conveys the idea of exhibiting that which has been proven, and the word "experiment" suggests the idea of a seeking after definite information. In Great Britain and in some of the other countries, however, the term "field demonstration work" is frequently used to include both of the ideas here referred to. It is with this broader meaning that the expression "field demonstration" is used in this paper.

SHOULD DEMONSTRATION WORK BE UNDERTAKEN?

The experiment stations have already obtained a considerable amount of valuable information and of choice material, both of which in many cases are lying almost dormant. Is it not true that farmers generally are not making very much use of the work of the very institutions which were established for their particular benefit? Having visited upward of 100 of the agricultural colleges and experiment stations of Europe, the United States, and Canada, I am convinced that the lack of cooperation between these agricultural institutions and the farmers themselves is one of the greatest weaknesses of the whole movement and should receive our thoughtful consideration. There are undoubtedly several reasons for this lack of cooperation, some of which do not come within the scope of this paper to discuss. Permit me to say that, in my opinion, one of the chief difficulties of the past has been the lack of a proper

medium through which the men of the station and the men of the farm could bring their work into closer touch and to the mutual benefit of all concerned. This can undoubtedly be done in an admirable way by the adoption of a carefully planned and skillfully managed system of field demonstration work. In planning such a system of field demonstrations the chief aim throughout should be to help the farmer. There is probably no better way to do this than by assisting the farmer to help himself. When the farmers once become both interested and active in the carrying out of some important and well-defined, though comparatively simple, line of experimental work, they have entered upon a course of thought and action the good results of which it is impossible to correctly estimate. If once started in the proper manner, this work can be developed in such a way as to not only enrich the lives and improve the farming operations of those who are actually engaged in the work but also to the betterment of agriculture generally. I wish to strongly emphasize the great importance of undertaking work of this character.

SHOULD DEMONSTRATION WORK BE COOPERATIVE?

"Cooperation" should be the agricultural motto of the twentieth century. It should be used in the true sense of the word for the development and the advancement along the highest possible lines of both the agricultural industry and of the people who are connected with agriculture. The farmer has worked too much by himself and for himself. Even in this age of keen competition he should take it for granted that it is a good thing to give as well as to receive. If he imparts his highest knowledge and relates his best experiences for the benefit of others, he is very likely to find that in some way or other his own knowledge will become greatly enriched, and that he will also have the satisfaction of realizing the fact that he has tried to help others.

Field demonstration work can be carried out on the lands of the experiment stations and of the substations; on the grounds of the fall exhibitions; in the fields of the industrial homes, and of various other public institutions; on the grounds of some of the schools and the colleges; and especially at the very homes and through the cooperation of the farmers themselves. I have very strong faith in the beneficial results of a properly conducted and comprehensive system of cooperative experimental work among the farmers of the United States and of Canada. Such a system would furnish hundreds and thousands of centers for interesting study along the lines of progressive agriculture. It would introduce to the various districts of the country the best kinds of seeds, plants, fertilizers, etc., and would teach men to experiment and to investigate. It would educate along the lines of careful handling, close observation, accurate calculation, and economical methods. It would unite science and practice and enable men to understand better and to appreciate more thoroughly the work of the various agricultural organizations. It would furnish an exceedingly valuable supply of definite information for the experimenters themselves and of general information for the farming community. It would lead to general use of better crops, to the adoption of better methods of cultivation, to the economic conservation of soil fertility, to the realization of increased profits from farming, and to the advancement of agricultural education throughout the whole country.

WHAT SUBJECTS SHOULD BE SELECTED?

The subject-matter which could be selected for field demonstration work is both varied and extensive. It would appropriately include the testing of leading varieties, selected strains, and promising hybrids of farm crops; the sowing at different dates and the use of different quantities of seed; the best methods of sowing and of cultivation; the growing of grains separately and in definite combinations for the production of pasture, of fodder, and of grain; the most suitable grasses and clovers for temporary and permanent pastures; the improvement of old pasture lands; the comparative influence on the soil of timothy and clover; the application of commercial fertilizers; the best times and methods for applying farmyard manure, and many other subjects which time and space will not admit of mentioning in this paper. These are matters of intense interest and of great value to practical farmers. The experiment stations can make elaborate experiments along all these lines, but on the station farm the results can not be brought to a final issue for the farmers. The field demonstration work first condenses and simplifies the station experiments, and then continues them throughout the country. It thus forms a connecting link between the experiment station and the tillers of the soil. Especially is this true if it takes the form of cooperative experimental work.

FORM OF ORGANIZATION NECESSARY.

I believe it is wise in the great majority of cases for the field demonstration work to have a distinct organization of its own. This organization could adopt suitable rules and regulations, plan its methods of operation, receive and expend the moneys granted for the work, and carry out the demonstrations to a successful issue. The headquarters could be located at the experiment station and the agricultural college to the advantage of both the station and the college, as well as of the organization itself. The membership might include the officers of the experiment station, of the agricultural college, and of the farmers' institute organization, the students and the alumni of the agricultural college, and the farmers who were taking an active part in successfully conducting the demonstration work. The board of control—made up of the officers and the directors—should be selected with great care and could be formed by electing representatives from each of the bodies mentioned above. The committees for special lines of field demonstration work could be appointed either by the board of control or by the whole body of members.

In Ontario we have had a carefully-planned system of cooperative experimental work in operation for the past twenty years. This work is carried on through the medium of the Ontario Agricultural and Experimental Union, an association composed of the officers and the students, past and present, of the Ontario Agricultural College. The cooperative experiments have been conducted in the departments of agronomy, horticulture, dairying, apiculture, animal husbandry, economic entomology, economic botany, soil physics, poultry raising, and forestry. In each of these departments the cooperative experimental work is under the direction of a special committee. In agronomy alone the number of experimenters has increased from 12 in 1886 to upward of 4,000 in 1907. In this department 35 distinct lines of cooperative experimental work were carried on this year.

Our board of control at the present time includes the provincial minister of agriculture, the president of the agricultural college, the provincial superintendent of farmers' institutes, three officers of the experiment station and agricultural college, one student of the college, and four practical farmers who are ex-students of the college and who are also cooperative experimenters.

The work of the experimental union is closely associated with that of the farmers' institutes. Many of the members of the institutes are also experimenters, the experimental plats are used as object lessons, and the results of the tests are frequently discussed at the meetings. The regular institute lecturers attend in a body the annual meeting of the experimental union, during which time their expenses are paid by the government. At this meeting the reports of the successfully conducted cooperative work is presented and discussed by the experimenters themselves and by other interested persons. These results and discussions are published by the agricultural press and in the annual report of the experimental union.

The experimental union has done a good work in uniting the various agricultural organizations into a closer cooperation. It has helped to popularize the agricultural college and its experimental work, as may be seen by the facts that fully 30,000 farmers visit, and 1,000 students now attend, the college annually. It has helped to increase the yield per acre of winter wheat by 13 per cent, that of oats by 18.9 per cent, of barley by 23.4 per cent, and also of the other crops on the farms of the Province. It is exerting an influence which is wholesome in its character, extensive in its operation, and far-reaching in its results.

The experimental union makes a study of the farmers themselves, as well as of the products of their labor. Its objects are to improve men and to help men to improve agriculture.

DISCUSSION BY T. F. HUNT, OF PENNSYLVANIA.

This topic is confined to the relation of the farmers' institute to field demonstration work. There has been a good deal of so-called demonstration work conducted under Federal and State auspices, but the speaker does not happen to know of a farmers' institute organization having undertaken such work. The subject is further limited by the word "field." If this word is to be taken literally then demonstrations in the garden, orchard, or stable are eliminated from this discussion. Finally, I must call attention to the perniciously loose use of the word "demonstration" in this connection. On November 16, 1905, there occurred in this city a discussion on the subject entitled, "How Much Demonstration Work and What Kind Should the Experiment Station

Undertake?" The persons connected with research work, mostly station directors, took part in this discussion, which occupies sixteen closely printed pages in the proceedings of the nineteenth annual convention of the Association of American Agricultural Colleges and Experiment Stations. Curiously enough, little was said about the kind or amount of demonstration work that experiment stations should undertake, but nearly the entire discussion was taken up in an attempt to define what was and what was not demonstration work.^a

It seems to me that if the purpose in view is to improve the practice of agriculture there are three ways by which it may be accomplished by any person or any agency. First, this person or agency may increase the knowledge of agriculture; that is, he may discover something new to the world at large or at least new to himself. It is not material whether it is discovery or a rediscovery, so long as it is original. He may, by proper processes of research, prove or demonstrate beyond the possibility of a doubt the truth or falsity of some theory, principle, or process which has been heretofore claimed as true by some other person or agency. This may be considered as increasing knowledge because a fact can not be considered as established, and, therefore, scientific, until it has been established beyond the possibility of a reasonable doubt. Such work is properly called research, or experimental work.

The second method of improving the practice of agriculture is by diffusing knowledge. A person or agency, after having discovered a truth, may seek to convey this truth to others, or this person or agency may seek to convey facts or principles which others have discovered or wrought out. This is education. Because some colleges have sought to convey information in a systematic manner to those who can not or do not come to the college, this method of education is known as extension teaching. It may, perhaps, not be out of place to call attention to the fact that the wording of the Hatch Act would seem to indicate that the only knowledge which an experiment station is commanded or even authorized to disseminate is that which it has itself discovered. This, of course, does not mean that the college of which the experiment station is a part may not or should not disseminate knowledge, but that if the interpretation which I have just given to the Hatch Act is correct, this form of instruction should not be carried on with funds received from the Hatch Act.

There is still a third method of improving the practice of agriculture. Men do not paint their houses or mow their lawns solely from motives of economy. A great many people do what is the fashion or what they are in the habit of doing. When you introduce a motive for a man to do as well as he knows how to do, you may improve the practice of agriculture without in any way increasing his knowledge. The great benefit of the oral over the printed word is the inspiration which the hearer receives from the speaker. It is on this account that the farmers' institute lecturer occupies a distinct place in the list of agencies for improving agricultural practice. He not only gives information, but by his personality he inspires men to greater and better endeavor. The chief value of the great art exhibit at the Columbian Exposition at Chicago in 1893 was not in the information which it conveyed, but because it inspired the people at large to place better pictures in their own houses. The value of the demonstration farms which appear to have met with great success in the South lies not alone in the education of the mass of farmers, but in the greater hope and faith that it has given them. It must be evident that a form of activity designed to improve the practice of agriculture may have any one of the three purposes in view, viz, discovery, education, or inspiration, or it may have any two of them, or all three of them.

One criticism of much of the so-called demonstration work has been the pretense that the purpose was to gain knowledge when the real purpose was to diffuse it. One

^a U. S. Dept. Agr., Office of Experiment Stations Bul. 164, p. 170.

further cause for the confusion in the use of this word "demonstration" in this connection is to be found in its definition. To demonstrate is "to establish so as to exclude the possibility of doubt or denial." Some have, therefore, conceived of demonstration work as the method by which a theory is shown to work, or by which the application of principle to practice is established. In other words, the experimenter wishes to demonstrate to himself beyond the possibility of doubt or denial that his opinions are true or have practical application. On the other hand, there are, as we all know, a great many people who are not reached by printed evidence, or who, if reached by it, are not convinced. For this class of people the attempt has been made to demonstrate to them beyond the possibility of doubt or denial that what has been carefully wrought out at some experiment station or elsewhere is true. In the one case we may say the purpose was subjective, in the other, it is objective. I have spent considerable time—perhaps too much time—in discussing this phase of the subject, because, to my mind, it is extremely important to keep in view the chief purpose for which the work is conducted. I believe the time is past when the investigations of the experiment station can be confined to the laboratories and a few acres of land near the headquarters of the station. The station staff should have its official eye on every acre of land in the State, and should carry on investigations in those sections of the State best suited to the subject under investigation. Apple growing may be a very important industry in the State, and yet the station farm possess neither the soil nor the climate adapted to commercial orcharding. At the Pennsylvania station an elaborate series of fertilizer experiments have been conducted for a quarter of a century on Hagerstown clay loam. This is an important soil type in the State. The information gained is of value to farmers living on this type of soil, but there are probably over 200,000 farmers in Pennsylvania living on other soil types. In southeastern Pennsylvania complaint has come to us concerning the yield of oats. It has been suggested that what is needed there is a winter oat. There is no way to develop a winter oat for that region other than by growing oats there for a series of years. It is impossible to do it at the station farm because the climatic conditions are quite different. What can be proved at the station farm is that plants are susceptible of adaptation to soil and climate. There are those who think that the Federal and State governments should stop at this point and let the individual citizen make the application to his own environment. I believe that we should use such agencies as will in the long run improve the practice of agriculture. We are dealing with a condition, not with a theory. What may be best to do under one set of conditions may not be best under another.

Because experiments differ so largely it is not possible to lay down a hard and fast rule, but in general real experiments or investigations, such as have just been mentioned, should not be cooperative in the sense that the farmer should contribute anything to the enterprise in land, materials, or labor. The land should be leased. If labor and material is furnished by the farmer, it should be paid for by the agency conducting the experiment, and all work should be performed by or under the immediate direction of this agency. To be sure, there are everywhere public-spirited men who, for the good of the cause, are willing to contribute toward such enterprises in land, material, or labor, but this should not be allowed to affect in any way the method of conducting the work. In seeking places to conduct investigations, both the adaptability of the place and the man must be considered.

Let us now turn to the great problem of diffusing agricultural knowledge and the place that so-called demonstration work plays in it. Without claiming to be comprehensive, some of the agencies for diffusing such information are colleges, schools, farmers' institutes, farmers' organizations, such as the grange and alliance, experiment station bulletins, correspondence courses, and agricultural newspapers. It is interesting to note that what is the best method of reaching two equally well educated

people is not necessarily the same. One man may see a series of lantern-slide pictures of horses conveying to his mind the adaptation of form to specific purposes, and remember the points brought out through his entire life, while not a word of the lecture which accompanied the pictures would be remembered. To another man the speaker's explanations may be the all-important information. Of two students in the same class one learns most readily from the printed page, the other from oral lectures or explanations in the class room. The complexity of possible methods of diffusing knowledge may be shown by an illustration that came to my attention recently. The Pennsylvania State College conducted last winter a series of lectures and practicums for busy farmers known as "Farmers' Week." I met one of the attendants of this Farmers' Week recently. He said he was a member of the grange in his locality, that he went to most of the meetings, and that since he had attended Farmers' Week hardly a meeting had occurred at which he had not been called upon to explain some point in the light of what he had learned at Farmers' Week. Here is a form of diffusing the investigations of the experiment station that is far-reaching in its influence.

The importance of the demonstration work lies, therefore, not in its intrinsic merit as compared with other methods of diffusing knowledge, but in that it may reach people who would not be reached in any other way. Experience seems also to show that this form of diffusing knowledge usually helps those who most need the help. You may take issue with me on this point, but it is probably fair to say that the hustling, prosperous farmer is usually not much interested in demonstration work. The reason demonstration work is more successful in the Southern States than in the North Central States is not far to seek. It is the farmer who is struggling along with difficulties and problems that are, or seem to him, insurmountable that the demonstration work helps and who is willing to undertake it. Such a man is aided, not simply by conducting some tests which point the way to better methods, but because he is brought in contact with some one who takes a sympathetic interest in his welfare and gives him helpful advice. The importance of demonstration work, therefore, often, perhaps, usually, depends upon the men who have charge of the work. Contact with such men as Zavitz, of Ontario; Stone, of New York; Goddard, of Ohio, and Knapp, of Louisiana, not to mention a host of others, is quite as important as the kind of tests which are made.

This leads to a caution as to the management of field demonstration work. It is of the utmost importance that demonstration work should be supervised by men who are capable of so planning and conducting field experiments that the results obtained may indicate the truth, otherwise, the results are worse than useless. While appearing to show what is not true, they tend to discourage the results of accurately conducted tests. Most people think that a field test is a simple matter which anyone of ordinary intelligence can plan and properly carry out. In fact, few men are capable of conducting such work. I have had occasion to examine much, if not most, of the results of field experiments in the United States and Canada during the past four years. On the banks of the Muskingum River in Ohio in the early days was a flouring mill run by water power. Into the river projected a spout through which the bran was conveyed into the river as the most economical method of disposing of this useless offal. In examining the literature of field experiments, I have been reminded frequently of this incident. The failure, in many instances, of field experiments to give results capable of interpretation has led some to denounce field experiments. In many cases the trouble is merely with the person who planned or carried out the work.

Shall field demonstration work be cooperative when its purpose is not to gain knowledge, but to diffuse it? It seems to me that this is not so much a matter of principle as it is a question of feasibility. It is true that cooperative experiments usually are much more largely sought when they involve the furnishing to the cooperator of some materials free of charge. The mere outlining of an experiment to be conducted by the

farmer entirely at his own expense creates little interest. I am not convinced, however, that it is a mere matter of getting something for nothing. When the central agency can furnish the materials better and cheaper than the individual, it should be done by the central agency. It is very much easier for the agency in charge of the demonstration work to prepare one hundred sets of fertilizers for some test than for one hundred farmers to prepare one set each. If the introduction of new varieties of seeds or plants is to be attempted it can best be done by the central agency. Whether the individual should be required to pay a part or all of the expenses of such materials may, perhaps, depend upon circumstances, and be decided upon the question of whether the information thus diffused is for the individual good or the common good of the community. In principle, I see no difference between furnishing the farmer a bulletin free of charge which tells him whether nitrogen, phosphoric acid, or potash is needed on his soil, or sending him some packages of fertilizers free, which, if applied, will tell him the same story. It is largely a question of the relative effectiveness and expense of the two methods of conveying knowledge.

It would seem useless to discuss in detail before a national organization the subjects for demonstration work. In its very nature the value of this sort of work lies in its localization. The purpose is to give to each man or each locality according to his or its needs. The agency or person in charge of this work must study the local conditions and plan such demonstration work as seems likely to be helpful. It is at this point that rare insight and acumen are necessary. The demand for help may come from a locality without any definite statement of the difficulties. A station was recently requested by a farmers' club to carry on some cooperative work. A meeting was planned, and the station officers attended. Before the meeting convened the leading men were asked about their specific troubles. They admitted frankly that they did not know what they were. They felt the need of help and had invited the station people to help them. Certain cooperative tests were suggested. The president of the club, in the most kindly spirit, wrote the station director afterwards that he was disappointed with the suggestions that had been made. He felt they had settled the questions involved years ago. As a matter of fact, the application of the principles to their specific problems had never been tried before. They did not see their own problems. The tests were made, and those making the tests and others seeing them declare they will be of great value to the locality. I know of nothing so difficult as the application of established principles to local conditions. This seems to me the final step in improving the practice of agriculture, whether that step be taken by the individual farmer on his own initiative or through the demonstrations or inspiration of outside agencies.

Mrs. I. S. Raymond, of Illinois, presented the following report:

REPORT OF COMMITTEE ON WOMEN'S INSTITUTE WORK.

Your committee would beg to submit the following report of work done in furthering the interests of women in the rural districts of the United States and Canada under the direction of the American Association of Farmers' Institute Workers. While the report does not show as rapid progress as your committee could have wished, yet we feel that the desire for organized effort in raising the home life of our rural communities has been more strongly felt (by both men and women) during the past year than ever before in all our States and Provinces.

The two countries were divided between the three members of the committee as follows: The Northwestern States, Mrs. I. S. Raymond, Sydney, Ill.; the Northeastern States, Mrs. Wells, Syracuse, N. Y.; and the Southern States and Canada, Miss R. Blanche Maddock, Ontario.

Mrs. Raymond wrote the superintendent of institutes and presidents of agricultural colleges in her jurisdiction asking for information regarding the teaching of domestic science at the farmers' institute meetings, or in separate sessions of women held under their auspices. She received very encouraging reports from almost every State and Territory. There seems to be a general feeling that it is right and practical for women to assist in the institute work. One faithful institute worker said: "Your work is

more important than ours, for the homemaking is the most necessary of all the subjects on the list."

The following were some of the items received:

Nebraska and Kansas led in women's institute work, having had special lectures in household science in their State colleges for a number of years. Texas reports a woman's section of the farmers' congress that meets during the summer months. Montana is assisted in institute work by the domestic science teacher of the university, and her assistants. They expect to extend and enlarge the work. Oklahoma reports that thus far they have been unable to secure the attendance of women at their meetings. Professor Olin, of the Agricultural College of Colorado, writes that they have some most interesting work in domestic science with nearly all their institutes. The dean of woman's work of the college has charge of this department. From the University of Nevada comes this word: "We have no farmers' institutes, but Miss Bardenwerper, of the school of domestic science, had a bread making contest among her students June 3, 1907, at the annual reception of the department of domestic arts and sciences." Berkeley, Cal., offers no courses in domestic science, but it is taught in many of the public schools and exclusive schools for girls in California. Institute work in Arizona is still in the formative stage. The work of the women has not received any special attention. Professor Tisdel of Wyoming sends the cheering news that their last legislature appropriated \$25,000 to erect a building for women. He says: "In this building we shall equip laboratories for domestic science work. We shall begin this work in the fall and no doubt the domestic science teachers will take some part in the work of our farmers' institutes." Superintendent Chamberlain of Brookings, S. Dak., says they have had only two seasons of institute work under State organization, but they have had lady lecturers each year, and have a number of successful organizations among the women. He says: "I find that wherever the ladies are interested in the institutes, we are assured of a successful meeting." The University of Idaho has a department of domestic science and the instructor assists at the farmers' institutes. They obtain very satisfactory results from their normal institutes of a week or ten days. Utah is making a slow but steady advancement in the teaching of domestic science. Mrs. Dalinda Cotev, dean of the domestic science and arts department of the university, assists at the institutes. Just now North Dakota has no women helping with institute work. Superintendent Miller, of Kansas, said that they had one lady from the college in the field for six weeks last year. This fall they expect to have several others. Nebraska has a home economics association. Miss Rosa Bouton at the head of the department has been much interested and very active in farmers' institute work. She is getting out a series of bulletins called, "A Home Studies Series," that will be very helpful in clubs or institutes. Oregon reports some good work done. Their institutes have been helped by workers from the State Grange, and the university, and they have had assistance from the State library commission with regard to traveling libraries.

A number of letters have been received, one from a club in Kansas asking for an outline of work, another from a lecturer desiring to do State work in the South, and many others desiring assistance in organizing. Mrs. Wells reports for the Northeastern States that decidedly increased interest has been manifested during the past year. In New York State women's institutes have been organized in a number of counties. A special grant (\$5,000) has been obtained from the legislature for this purpose, and plans are now being laid for a systematic campaign of work during the coming winter. In order to prepare for this an article headed "A National Movement for Farmers' Wives," which outlined the plan of work was published in a number of the farm papers in the Northeastern States.

In Ohio the services of Mrs. Mary Lee, a worker in the grange, have been of great value.

Illinois has for some years led other States in household economic department in connection with the farmers' institute, having had the Illinois Association of Domestic Science affiliated with the farmers' institute of the State. This association has been steadily progressing and now has an organization in 89 of the 102 counties of the State. The counties sometimes have as high as 8 auxiliary clubs. Woman's work in the institutes is done at the regular time of the farmers' institute. The domestic science workers sometimes have separate sessions, but all expenses are paid from the appropriation allowed the farmers' institute. They had 21 speakers on the list beside the occasional help from the university. Mrs. Jennie C. Barlow, secretary of the association, did work for the university in 30 institutes. The attendance is always good at the domestic science sessions. The regular sessions in the 79 counties have been conducted at an approximate cost of \$1,070. This does not include the expense of the State meeting. The sum of \$200 was allowed for that last year, and separate sessions

from the Illinois Farmers' Institute were held most of the time; one afternoon and both evenings the women attended the general sessions. The report of the sewing institute is printed by the Illinois Farmers' Institute as a part of its annual report.

The State Fair School of Domestic Science, which is supported by the State board of agriculture, and held the week before and during the State fair, this year had an attendance of 79. Last year it was 44. The domestic science organizations of the counties recommend worthy girls and women for scholarships in this school, and these girls or women report at the farmers' institute what they have learned during the two weeks at the regular county institute, thus interesting many. A new feature this year is the giving of the three scholarships in the household science department of the University of Illinois to those getting the highest grades in their work in the State Fair School.

Dean Davenport and Prof. Isabel Bevier have just given assurance that they will be prepared to give the women and girls of the State four weeks' instruction in household science, called a housekeeper's course, instead of the two weeks' free instruction that was offered last year.

The number of students in the household science department of the University of Illinois is now 150. The first year they had enrolled only 20. Great progress in the teaching of household science and household art has been made during the past year in the public schools of Illinois. Many teachers and superintendents of schools cheerfully assist in farmers' institute work, and all are interested in domestic science work.

Miss Maddock reports steady progress in her divisions, the Southern States and Canada. An article explaining the objects of the women's institute was sent to the superintendents of farmers' institutes in the South, asking to have them published in as many southern papers as possible. Miss Maddock attended a number of institute meetings in West Virginia during the past year, sometimes giving three addresses in a day, having always a good attendance of eager, intellectual women. She did not consider it wise to organize separate women's institutes in West Virginia, as the directors thought it would weaken the farmers' institutes were the women to meet apart from the men. Throughout the South "there is a general desire for more up-to-date methods of work, especially in housekeeping."

In Canada the work is progressing favorably. Lady speakers were on the institute staff in almost every Province. Separate sessions were held for women in the afternoon, and joint meetings in the evening. In Ontario there are now 11,000 members of the women's institute. One of the newest features of women's institute work in Ontario is the convention held in Guelph in December. Last year approximately 500 women attended. This convention stimulates the delegates to fresh efforts in their own districts, thus supplying new material for the year's work in their different localities. Another movement brought about largely through the efforts of the women's institutes of Ontario is the arranging of a course specially fitted for farmers' wives and daughters, at MacDonald Institute, the household science department of the Ontario Agricultural College.

The committee feels that the importance of woman's work in the farmers' institute can not be over estimated. There is need of further organization and great need of well-trained lecturers and instructors in domestic science. Plans for giving instruction must be worked out. Subjects for discussion selected, some suitable for women's sessions, and others that will interest a general session of a farmers' institute. We recommend for organizers—if it is possible to obtain them, women possessing the educational qualifications that make them competent, who have also had practical experience that puts them in harmony with farm life. We heartily recommend the organization of auxiliary clubs for study and demonstrations. They directly influence the homes, and make their members self-reliant. Frequently able club workers are valuable factors in conducting their home institutes.

Miss R. BLANCHE MADDOCK,
Mrs. I. S. RAYMOND,
Mrs. HELEN WELLS,

Committee.

G. A. PUTNAM, of Ontario. The extent of the work in Ontario has reached very great proportions, and the women feel that its value is not so much from the direct information which is carried to them by the lecturers as from the opportunity given them for social intercourse. Women's institute work, as all institute work, must, to be successful, be organized upon a plan which will throw the responsibility largely upon the people directly concerned. The main object of the women's institute work and the main object of the farmers' institute work to-day is to create local interest.

As a development of this idea of local responsibility we recently recommended to some of our county officers that they hold county conventions. One of these was held this fall, the first that we have held, in the county of Gray, a representative county of the province, having 23 local institutes. They had at that convention about 200 women from various portions of the province.

Meeting adjourned to convene at 3.30 p. m. Thursday.

AFTERNOON SESSION, THURSDAY, OCTOBER 24, 1907.

The convention was called to order at 3.30 p. m., the president, E. A. Burnett, in the chair.

Mrs. Mary E. Lee, of Ohio, read the following paper prepared by Mrs. Mary A. Wallace, of Pennsylvania.

THE WOMAN LECTURER.

The first and most important qualification to insure the success of the woman lecturer is that she know her subject, be able to concentrate her thoughts upon it, and express them clearly and concisely. The "gift of gab" as we understand it is not a necessary qualification. We have all heard persons with this gift whose lectures were "as sounding brass and tinkling cymbals."

The lecturer who talks direct to the question in a manner that indicates that she means what she says and knows whereof she speaks will always have a hearing. She should make it a rule always to talk in an earnest, natural manner, and avoid mannerisms and affectation.

The cultivation of the voice is also of much importance to the woman lecturer. The voice impresses an audience agreeably or otherwise according to its character. It should be pleasing, and it should be of such volume and power that the speaker may be heard by her entire audience. A weak, low voice will destroy the effect of the best paper, whereas a full, rich, and clear tone will not only be heard, but will have a pleasing effect even if the subject is not so well discussed. A public speaker must make herself heard to the limits of the room or else she is a failure no matter what other qualifications she may possess.

Another—I hardly know whether to call it qualification or not—something the woman lecturer must possess is good health. Traveling late and early, in all kinds of weather, and in our Northern States, occasionally stuck in snowdrifts, or placed in cold storage at night, is hard on the healthiest.

As I have already intimated, the woman lecturer is an innovation on the old order of things. We believe that she is here to stay; but another qualification quite necessary to insure her success is self-reliance. At all times, and especially when first starting out, I would say to the woman lecturer, be self-reliant; go right along doing the work assigned you, and do it to the best of your ability. Be kind and courteous to your coworkers, and you will receive similar treatment in return.

Another thing that I would urge upon the woman lecturer—although it may not be considered a necessary qualification, will, I am sure, add greatly to her popularity and influence—is to be friendly and cordial with the women who attend the institutes where she lectures, mingle with them, and if any of them are desirous of gaining information on something outside the institute programme, invite them to her hotel or boarding house between sessions. They will enjoy such visits, and the encouragement and helpfulness will always be remembered with pleasure.

The mission of the farmers' institute is educative, hence the necessity of the lecturer being thoroughly informed in the subjects which she attempts to teach. She must not make the mistake of underestimating her audience, for the majority of farm women to-day are bright and intelligent and are reading, thinking, and acting for themselves more than ever before. Perhaps the most important factor affecting success as a lecturer consists in the proper selection of a subject. As there are so many questions to-day of vital interest to farm women, there need be no mistake in this respect. One rule should govern—teach the things that touch life and select your subject accordingly.

DISCUSSION BY MRS. MARY E. LEE, WESTERVILLE OHIO.

The women's institute lecturer should be possessed of ability to impart instruction and arouse interest in further study. Sympathy, enthusiasm, consecration, efficiency, are all essential, but the greatest of these is efficiency. Sympathy is a divine attribute,

but it never prepared an appetizing meal, well-balanced, that was converted into productive energy in the human furnace. Enthusiasm is good, but it never bound up a wound or saved a life while the doctor was coming; consecration is essential and beautiful, but it may not possess the prime qualifications necessary to do well. Sympathy, enthusiasm, consecration plus efficiency will do more to cure human ills than any other quartet of human qualities. Dr. William H. Allen voices the modern true conception in his *Efficient Democracy*, "To be efficient is more difficult than to be good." Efficiency, plus average goodness, will accomplish more for human happiness and human progress than goodness, minus efficiency. Efficiency develops goodness as time, clock and cash register develop habits of punctuality and honesty. Not long since charity work was relegated to good souls, as was nursing. We have now pretty generally gone over to the point of view that trained fitness, capacity to perform, are indispensable, and by no means coexistent with desire to do or mere goodness."

You can not pick up a magazine of high order or enter a convention of broad-gauge men and women but the demand is voiced for better workers, and better from the standpoint of being able to perform exactly the work one is set to do. Society in any age has never risen higher than the women of that period. For the reason that the farmers' institute has been, is, and will be yet more in the future, one of the great forces in human development, I feel that those women should be selected as teachers and leaders in this work who represent the highest type, those who can and do think clearly.

At various times through the medium of our paper, at farmers' institutes, at grange meetings, and women's clubs, I have asked these questions: Do you favor women institute lecturers? Shall they come from the rank of good housekeepers with no special training for the work, who simply do as their neighbors do, or shall they be from those who have studied and know better ways of doing things than is apt to be handed down by tradition? The answers are so nearly uniform that I summarize:

"We certainly want women lecturers, but most farm women are good cooks and keep houses clean. What we want is instruction in how to do the work better, with less energy, new methods where new are better than the old; how to make our homes beautiful and healthful, from which we can send our families into the world with strong, alert bodies, tenanted by clear minds and clean hearts, people capable of sustaining long stretches of mental and physical effort, or sudden demands that sap vitality. We want more leisure for improvement, music, reading, and a social life. Someway, we are losing the best of living, and we believe a better way can be found. We want those who are paid to teach us, to help us to that better way. And we want women who have given time and study in preparation, who know, to teach us.

"We feel that more harm has come through faulty teaching than can be rectified in years. In the beginning of a new era we want to start right."

Coming from so many sources, I feel that this can be called the universal demand of my sisters on the farm. Hence I plead in the establishment of the new order that competency be made the first desideratum.

Where are these trained women to be found? Let it be known that women are to be employed at a good wage and that a standard of efficiency must be met, that they must be submitted to a civil-service examination, and that a certificate or a diploma from a first-class school in domestic science is of importance as a recommendation, and the bright women of the farm will do the rest. It is purely a business matter. People will go where it is to their interest to go, will do the work it is their interest to do. If women know there is a demand for their services, schools of domestic science will be thronged instead of business colleges teaching stenography and bookkeeping.

We are coming to a saner notion of education. No matter how high notes a girl can reach or how delicately she can embroider or how many languages she can speak—though these are essential to a well-balanced life—if she can not perform some useful

service in an exact and effective manner she is uneducated. For some good reason the Creator has made it necessary to perform manual labor. In the perfection of its performance lies the solution of some of the most perplexing problems in our national life. Competent service will bring financial gain and honorable recognition. The rank of the work in the minds of people is pretty accurately gauged by what they are willing to pay for it. Raise the standard of excellence, and recognition in the line of honor is raised. Housework has been praised by poets, but it was the poorest paid of all labor. Not till house help became scarce through higher prices and more honorable recognition of women's work in other lines of industry did the home begin to achieve anything like the rank the poets gave it. The whole question is purely an economic one, and science, the "best friend to mortals given," must solve it. A woman lecturer fails in her mission if she does not show that there is a distinct financial gain in a sanitary home, well-balanced, well-cooked food, and rooms furnished with dignity and in an artistic manner.

I would not convey the impression that none but college-bred women should be employed. Far from it. But I do say that the good business woman with practical, common sense will be greatly aided by the many advantages which college training affords. A genius may get along without it, but the average woman will reap great advantage from it and secure a higher degree of efficiency in her work. Common experience has pierced the bubble that "the best scholar may be the poorest teacher." She may be, but is not apt to be. It is impossible to come near a scholarly woman without being led to higher things. Her influence is as pervasive as the fragrance of the rose.

People are expecting from those publicly employed labor commensurate with the pay. They demand that excellence shall be in the public service, and hold that a poor lecturer or teacher always keeps out a better. The art and science of home-making is in its infancy. There is much to learn and much to be carried to the people that is already known. The harvest is great; expert laborers are few.

My final statement is, that those who go out to instruct women shall know whereof they speak; shall know their subject well, and treat it not as a thing separate, but as an essential part of life; shall know it so well that it becomes familiar in their hands, and therefore easily explained. Such lecturers will spiritualize knowledge, and show it in its dignity, grace, and beauty, as well as in its practical application to the affairs of life. Set your standard high, and you can be assured that the women on the farms will recognize the value of the best that you can do in their behalf.

There was extended discussion of the subject by K. L. Butterfield, of Massachusetts; A. L. Martin, of Pennsylvania; A. D. Wilson, of Minnesota; Mrs. Mary E. Lee, of Ohio; G. A. Putnam, of Ontario; Tait Butler, of North Carolina; N. B. Critchfield, of Pennsylvania; and L. R. Taft, of Michigan.

F. H. Rankin, of Illinois, presented the following paper:

THE TRAVELING LIBRARY.

All that I shall attempt to do will be to briefly outline the views of some of those who have been most closely associated with this work in Illinois. I have been favorable to the library reading course and at all times have used my influence to encourage this movement, and have sought to place a greater number of libraries in the field. However, there has been a growing feeling that according to carefully kept records the circulating library, as carried on in connection with the Illinois Farmers' Institute, was not of special value. In fact, what I may have to say on this subject will be confined wholly to Illinois conditions and guided by facts, although this is contrary to my personal feelings in the premises.

Beginning with 1901, \$2,500 per annum was appropriated by the State "for the purchase of books for the maintenance and management of the Illinois Farmers' Institute free libraries." These libraries were selected, equipped, and circulated through the office of the Illinois Farmers' Institute. The libraries could be secured for a period

of six months by any community by application signed by five or more citizens who should name some person conveniently located who would be interested in having the books used and would act as librarian. The only expense to the community was the expressage on the books. These libraries were put up in strong boxes containing from 35 to 45 volumes, weighing about 85 pounds each. The total number of volumes used was about 10,500. According to a late report the libraries have been sent to 87 of our 102 counties and have been used by 675 communities. The approximate number of books loaned is 75,000, the number of readers, 145,000.

The thought was that these libraries should bear the same relation to the Illinois Farmers' Institute that the school library does to the school, or that the normal and university libraries bear to the work of these institutions. The books were intended to meet all the needs of a small community that could be supplied by a public library, the prime object, however, being to give instruction in agriculture and household lines. There were, therefore, a larger percentage of technical books along these lines than is found in most libraries. Each library contained as books of reference from 5 to 10 volumes of reports of the State experiment station and the United States Department of Agriculture.

A record of the library for 1906 will give a fair idea concerning its use along agricultural lines. The following is the percentage of agricultural and domestic science books used from 86 libraries:

	Per cent.
From 1 library.....	5
From 1 library.....	4
From 4 libraries.....	3
From 9 libraries.....	2
From 18 libraries.....	1
From 53 libraries less than.....	1

About 98 per cent of the librarians were school-teachers. The books most popular seemed to be those stories which would interest children.

The chief thought in introducing the library was that it would be a valuable adjunct in creating and stimulating a greater interest in improving the present agricultural conditions. The experience of some six years convinces those in charge that under existing conditions the results obtained do not justify the expenditure. By the records which have been carefully kept and partially cited above, it was found that only a very small percentage of the agricultural books were called for, not more than about one per cent on the average.

The institute officers and others interested watched the matter carefully for some time and had numerous discussions on the subject, and it came to be an almost unanimous opinion that they were far from accomplishing the results sought. It was not the purpose of the Illinois Farmers' Institute to go into the library business only on account of its anticipated aid to agriculture, and as after a few years' experimenting it was found that over 98 per cent of all books called for bore no relation to agriculture, the conclusion was inevitable that it was out of the province of the farmers' institute to engage in the library business for the almost sole purpose of supplying books that were no aid in agricultural work. Of course, it is possible that a wiser selection of books for these libraries might have been made, but after much experimenting it seemed that the officers could not make such a selection.

In the foregoing statement we have tried to be influenced by facts gathered from the records which have been carefully kept in the office of the farmers' institute. To quote from a recent letter received from Mr. H. A. McKeene, secretary of the Illinois Farmers' Institute:

"Each library that has been returned to this office after a stay of six months in a community has been carefully examined, the number of loans counted, and the percentage of books upon agricultural and domestic science subjects used is figured from the librarian's report and a record kept. These reports have been carefully gone over, not alone by the secretary, but by the library committee of our board of directors, and the figures verified a number of times from the stubs of the books kept by the various librarians. I am convinced that no one connected with the institute work would care to say anything which would or might be construed as reflecting on the value of the circulation of good books, but the indisputable fact is that the experience of the institute has been such as will warrant them in believing that the time, energy, and money expended in the library circulation might be put to a better use so far as benefiting the institute work of the State is concerned."

At a meeting of the board of directors of the Illinois Farmers' Institute in March, 1907, the legislative committee, through its chairman, Director A. N. Abbott, made the following report:

"It is the opinion of your committee that the result which it was hoped would be obtained through the circulation of the Illinois Farmers' Institute libraries has failed to be realized. As a means of disseminating agricultural information they have been a failure; less than 1 per cent of the books read have been of agricultural character. It is not the purpose of your committee to question the good which the libraries accomplish from a literary standpoint, but it is neither the purpose nor the province of the institute to do general literary work. It would therefore seem advisable to dispose of the libraries, if this can be properly done, so that the time, space, and cost of doing this work can be transferred to other and more appropriate channels. A bill is now pending before the legislature which has for its purpose the creating of a State library commission. If this bill should become a law, we have reason to believe that the commission would gladly relieve us of these 250 libraries, containing about 12,000 volumes. In case this commission should not be established, the books could properly be distributed among the various State institutions. It is the opinion of this committee that this board should take action in regard to this subject at this time."

On motion the board voted that the matter of the disposal of the libraries be left to the legislative committee with power to act. The bill creating the library commission did not pass, and the institute still has the libraries—132 in the field and 118 in the office.

We hope to be not misunderstood in this matter, for there has never been any question as to the value of the work as a means of cultivating the desire for reading in rural communities; but as an adjunct to the farmers' institute in the way of creating and stimulating a greater interest for agricultural literature the circulating library has failed as yet to reveal its especial value under conditions such as we find them in Illinois.

DISCUSSION BY C. B. GALBREATH, OF OHIO.

Basing what I say upon our own experience, I should have little to enter in dissent to what Mr. Rankin has said. In the preparation of the paper which I am about to read it was my purpose to relate our experience in Ohio in dealing with this traveling library proposition. It has been most successful from the librarian's standpoint. I do not know that we have done much to help the farmers' institutes or the farmers' institute instructors, but I am sure that the farmers' institute, our agricultural college, the farmers' institute instructors, and my friend, Mrs. Lee, have done much for us, and have helped to make our traveling library system the somewhat phenomenal success that it has been in Ohio. Our system has been popular in the farming communities. The Illinois situation, as described by Mr. Rankin, means doubtless that in many of the farming communities the people are well supplied with some sort of agricultural literature; that they are reading, perhaps, agricultural papers, and the simple fact that these books are not in demand indicates that there is not the pressing need for them.

The President to-day expressed the hope that the farmers would devise ways and means to keep the farmer boy on the farm. This we hear at almost every turn. If you want the boy to stay on the farm you must make farm life attractive to him. He must not only understand the scientific phase of his special work, but he must have the educational advantages, the social opportunities, and some of the innocent diversions of city life. The traveling library takes to him additional educational advantages, and is often the source to him of an inspiration the results of which we can not measure.

After all is done that can be done, you are not going to keep farmer boys and farmer girls on the farm. The world is calling for them; the call is the demand of necessity. Take from the places of trust in our Republic the boys that were born on the farm, and where should we be? I believe that elementary agriculture should be taught not only in the rural districts, but in the cities as well. We must turn the people from the congested sections of America back to the farm.

The traveling library is not a "new thing under the sun." Contrary to popular impression, its origin was remote. Some form of this device probably dates back to the earliest efforts to disseminate learning through the medium of libraries. The

origin of the system, however, is not a matter of practical interest. You are concerned chiefly in its present status and its utility as an agency for the dissemination of useful literature among farming communities.

The State library, like the university, for generations was not what its name would naturally suggest. It should have been called a State officials' library. It was open to the people, if at all, only for reference purposes in the library room and under circumstances that made it practically inaccessible.

About the year 1889 Melvil Dewey began to make himself heard in a plea for State library extension. He declared, in substance, that the State library should be Statewide in the sphere and character of its work—that to it should open up avenues which would make it readily accessible to every citizen of the State. The development of this idea was at first confined to Mr. Dewey's State, New York, but the movement has gradually extended until in some form it has been accepted by almost every progressive State of the Union.

One of the agencies selected by Mr. Dewey for State extension of library aid to places remote to the State capital was the traveling library system. As we have seen, this system was authorized in New York in 1892, where its actual work began early the following year. Other States followed the lead of New York. According to the latest report of the League of Library Commissions, affiliated with the American Library Association, twenty-two States are now supporting traveling library systems. This report, so far as it goes, is substantially correct, and I trust it may be included as an appendix to this paper. One State has been entirely omitted, however, and in one or two instances biennial, instead of annual, results seem to have been included. But taking the report either as it stands or in corrected and extended form, the fact is apparent that in the number of traveling libraries issued, the number of volumes circulated, and the number of communities reached, Ohio leads all other States. This record we have held for at least three years. We are proud of it, and we point with especial satisfaction to the fact that a very large proportion of the books go to those who do not have other library privileges—the farming communities of the State. For the fiscal year ending November 15, 1906, 1,106 traveling libraries, aggregating 40,007 volumes, were issued to 796 different communities. These traveling libraries were distributed as follows: To women's clubs, 187; to schools, 526; to granges, 110; to independent study clubs, 126; to religious organizations, 94; to libraries, 27; to men's clubs, 26. In addition to the libraries sent to granges, a large number of those issued to schools and special study clubs go to farming communities.

On April 22, 1896, the general assembly enacted a law that vested the entire management of the State library in a board of commissioners. This act had its inception in the active interest of Rutherford P. Hayes, son of President Hayes, and to this day a library enthusiast, whose unselfish work is not forgotten by the friends of the library movement of Ohio. The bill was introduced by Hon. James R. Garfield, then a State senator, now Secretary of the Interior, who advocated it before the general assembly until it became a law.

The law provided for the appointment of three commissioners, one for six years, one for four years, one for two years, and thereafter one every two years to serve a term of six years. Mr. Hayes was appointed for the long term, and the board soon afterwards organized for work. After the election of a librarian, an assistant, and a janitor, ways and means were considered to make the library accessible to the people of the State. Rules were adopted, opening the library an hour earlier in the morning, keeping it open through the noon hour, and giving the citizens of the entire State the privilege to use its books. When the commission entered upon its duties the patronage of the State library was limited. This gave opportunity for rearrangement of books and

other necessary preliminary work. In the early meetings of the board, the traveling library system was informally considered. The general impression was that nothing could be done before the meeting of the general assembly. The library law made no mention of the traveling library, and the thought of it was certainly in the mind of no one when the law was enacted. A fortunate discovery was made. Hon. J. F. McGrew, then a member of the board, and now its president, found the desired opportunity in the following provision of the law:

The board of library commissioners shall * * * make such rules for the government of the library and the use of the books and other property of the library as they may deem necessary.

The board promptly proceeded to "deem necessary" the introduction of the traveling library system to facilitate the loan and use of books.

No appropriation of money had been made for this new departure. The material at hand for the work was the collection of books in the State library, the usual appropriation for the purchase of new books, and the enthusiastic interest of the board and the library staff.

Announcements were made explaining the traveling library system and inviting applications for traveling libraries. The forms for application, agreement of borrowing organization, and other blanks were modeled closely after those of New York. A few weeks after the initial announcement an application was duly filed for a traveling library. Books were selected from the shelves of the State library to meet the request. In the making up of the very first traveling library issued a new feature was introduced that became the basis of almost phenomenal success of the system in Ohio. The right of the borrower to have a voice in the selection of the books was recognized. Thus was inaugurated the so-called "flexible collections" that have since become a feature of traveling library work in many other States. Of this we shall speak again.

In the purchase of new books for the State library the board made selections to meet the growing demand of our traveling library patrons. Plain, rough, but substantial boxes were furnished by the State for these collections of books. From a small contingent fund our janitor furnished each box with hinges and padlock. Books were selected in response to requests, and the first traveling libraries of Ohio went forth on their mission.

The conditions under which these libraries are issued are very simple. The organizations to which they are sent obligate themselves for their proper use and safe return. Duplicate lists of these books, with the condition of each volume noted, are sent to borrowers. One of these is signed and returned; the other is kept. Both parties are thus protected if a question should arise in regard to the condition of the book when issued or returned. From 20 to 50 volumes are sent out in each library. They may be kept four months and renewed for an additional period of four months. The borrowers pay transportation both ways. Such, in brief, was the plan at the beginning, and such, with no essential modification, it remains to this day.

Some difficulty was at first experienced in bringing the system to the attention of the public. The first agency appealed to was the public press. The daily papers of the State, through their representatives at Columbus, made generous mention of the new departure and did all that could be desired to bring it to public notice. The results at first were not very encouraging. The State Federation of Women's Clubs became interested in the movement, and through the kindly aid of this organization a number of libraries were sent out. To the lecturer of the State grange is due much credit for introducing the system to the granges. Leading educational and agricultural papers also supported the movement.

Under these conditions the traveling library system in Ohio commenced its work. The first box of books was issued October 9, 1896. In a special report of mine read at

an interstate conference of library workers, held at Evanston, Ill., February 22, 1898, are found the following concluding statements:

The results may be given in a few words. Since October 9, 1896, 225 traveling libraries have been sent out; 164 of these have been issued since November 15, 1897. They have gone to all parts of the State. The granges have drawn 72; the schools, 37; other organizations, 106.

Applications for these libraries are steadily increasing in number. Thus far the drain has not seriously crippled the State library. We are fast approaching the limit, however, at which special provision must be made to meet the popular demand.

The legislature now in session, we have every reason to believe, will provide ample means for carrying out the work already inaugurated with tangible results and flattering prospects. Good books are safe friends; the best never grow old. This report is submitted with an abiding faith that the State of Ohio will send them forth on their beneficent mission to those who are waiting and calling for them.

The faith here expressed had its reward. The general assembly appropriated \$4,000 for a department of traveling libraries, and to-day Ohio has in this department over 46,000 volumes selected with special reference to the needs of a constantly increasing number of patrons whose requests cover a very wide range. Women's clubs, men's clubs, girls' clubs, boys' clubs, rural schools, high schools, religious organizations, granges, farmers' associations, special study clubs, and libraries—these indicate roughly the varied character of our patronage.

The success of the system in Ohio is, of course, due to the fact that it has attracted and held patrons. It has done this, first, because it has from the beginning, as far as practicable, given them a voice in the selection of books; and, second, because from its introduction much has been done in the purchase of new books to anticipate the needs of patronizing organizations.

The privilege to choose the book borrowed is as old as the free public library. When the patron makes a request there is little thought of dictating what he shall borrow. He steps up to the charging desk, asks for the book he desires to read, receives it, and goes on his way rejoicing. Within very broad limits he exercises, without question, the freedom of choice. It is certainly reasonable that the traveling library, as far as possible, should afford the same privilege. As first introduced in a number of States this was impossible. The collection of books was fixed. From 25 to 50 volumes were selected, catalogued, placed in a box, and loaned to an organization. If it happened to contain the books desired, all was well. If it contained only a few of the books, the entire box must be borrowed to secure the use of the few. To illustrate: Suppose a reading club makes application for books. One member wishes a life of Napoleon, another a life of Gladstone, another a life of Lincoln, another a book on corn culture, another a book on the bee. An application is made for a traveling library, and the person in charge of the system sends word that the lives of the three eminent men named are found in three different traveling libraries and that the last two books desired are included in a library on agriculture. Four traveling libraries must therefore be issued at intervals of from six to eight months to supply the five books desired. The weak point in such a system is readily apparent. An organization will not grow very enthusiastic over the fact that it must borrow 25 books to get two or three that it desires to read.

From the beginning our board of commissioners has in large measure avoided this difficulty by the flexible system which it originated. When such a request is received books are taken from the shelves of our traveling library department to meet the demand. These books, numbering in all from 25 to 50 volumes, are placed in a box and shipped to the patrons. When they are returned they are taken out of the box and again placed on the library shelves in the order of their classification. From the books on the shelves new traveling libraries are made up as new applications are received.

Some will ask whether the choice is left absolutely to the patrons of the traveling library. The answer is, No, not absolutely. If some one should request Webster's International Dictionary, or The New International Encyclopedia, these works would not be sent. If, as has happened in a few instances, an association should express a desire for a collection of books made up entirely of the latest popular fiction, the request would not be granted. The proportion of fiction in any collection is limited to one-third, and discriminating care is exercised in all purchases for this department; but there is no disposition to impose upon patrons books on any particular subject.

Some mistakes were made at the outset of the experiment, when the choice of books was left entirely to those in charge of the system. The presumption was that a library sent to a grange should be made up entirely of books on agriculture. The folly of such a presumption is so apparent that I almost blush to admit that, in an hour of absent-mindedness, I thoughtlessly entertained it. One who grew up on a farm should have known better. I might plead as an excuse that what I did had the sanction of a teacher of agriculture. The mistake was soon discovered and promptly rectified.

We are all, of course, interested in our special occupation or profession, but a yearning for knowledge outside of it is natural and proper. I greatly enjoy my present work, but I should thank no one for attempting to confine my reading to library economy. It is a dry diet, and one who feeds on it exclusively is likely to develop enough dust to make an Egyptian mummy sneeze in its sarcophagus. In like manner the farmer will tire of provender limited to agricultural literature. A model library for a farming community will always contain some books on agriculture, but they will not constitute all, or even half, of its volumes. There should be books of history, travel, description, poetry, and some of the approved works of fiction as well, including in the last class the old masters, that are ever new to the rising generation. There should also be a goodly number of books that will appeal to children.

I have said that some agricultural books should go to the rural communities. I am inclined to think that about an equal proportion, but of slightly different character, should go to the city. Much is properly said in favor of the teaching of elementary agriculture in the rural schools. Is it not equally important that it should be taught in our city schools? If the surplus population of our crowded industrial centers is to be turned to the healthful but sparsely settled country districts, the city youth must be taught the advantages and beauties of rural life. They must learn that it is just as honorable to follow the plow as to stand behind the counter, bend over the lathe, or guide the electric car through the mazy street, distracting in its confusion and roaring with the tumult of commerce.

But we may not digress. What are some of the specific results of the traveling library work in Ohio? That it finds patrons is evident from the annual reports. Are these held from year to year, or are they the evanescent product of artificial and spurious enthusiasm?

On November 13, 1897, the first traveling library was issued to a farmers' organization. It went to Darby Grange, near West Jefferson. From that date to the present this grange has been a regular patron. It has received in all 25 traveling libraries, aggregating 787 volumes.

It is fair to presume that the patrons have appreciated and used these books. At one time when there was a little delay in forwarding a new collection after the return of a traveling library, representatives of the grange stated that the books were very much missed, and expressed regret that they should be without a supply for even two or three weeks. In 1899, in the same community, was organized the Darby Hills Library Association. It was noticed that the patrons of this organization included a number who belonged to the Darby Grange. This association has to its credit 16 libraries, aggregating 544 volumes.

To both of these organizations, composed in part of the same members and in the same community, have been sent an aggregate of 41 traveling libraries, numbering 1,331 volumes. Here we have a pretty substantial illustration of continued interest and appreciation.

The Blendon Grange of Westerville, since it took up the work, July 6, 1901, has had 13 libraries, containing in the aggregate 465 volumes.

The record of Springfield Township, Clark County, is of interest. These traveling libraries went to rural schools. They were discontinued when permanent local libraries of 200 volumes had been purchased for each of the schools. This shows the missionary influence of the system. Twenty-seven libraries, aggregating 771 volumes, were issued to the board of education of this township from January 26 to December 3, 1903.

The record of traveling libraries issued to the rural schools of Crawford Township, Wyandot County, Ohio, and covering a longer period of time, January 12, 1901, to November 15, 1906, was 42 libraries, containing a total of 1,215 volumes.

Other specific instances could be given, illustrative of the fact that the traveling library department is continually making new friends and holding old ones. There are exceptions, of course, but the statistical summary for the entire period shows an uninterrupted and healthy growth. From the organization of this department the demand has taxed to the utmost our facilities for issuing traveling libraries. In some States the complaint has been made that the people do not care for these libraries. In Ohio that condition has never developed. As already stated, we are now sending them out at the rate of over 1,100 libraries a year. We are somewhat proud of the record, but we realize that we have simply advanced to the borderland of what might be done. There is no good reason why in time, with proper facilities, we should not issue 8,000 traveling libraries a year, the greater portion of them to farming communities. While a number of things may prevent this, there is only one contingency that we hope may ultimately limit the circulation of the traveling libraries, and that is the establishment everywhere of permanent local libraries. One of the most potent agencies to this end is the traveling library itself. The objects of the system as set forth in one of our earliest circulars are: (1) To furnish good literature to the public, (2) to strengthen small libraries, and (3) to create an interest in the establishment of new libraries. After an experience of eleven years, through which these objects have been kept steadily in view, I can report substantial and steady progress toward these three ends. It is especially gratifying to know that first among the beneficiaries of the system are those who hail from the region where the grass grows green in the valleys and the hayseed ripens on a thousand hills.

W. C. LATTA. Have you data as to the percentage of books of the different kinds read?

Mr. GALBREATH. No; but I should judge that in a collection of 25 books the average is not less than six on agriculture that go to the grange organization. Suppose the average is only three, in the course of ten years a great many good books on agriculture will have been taken into that community. Most of the agricultural books are read, although no report is given. I should say that on an average those six in the library sent to farming communities would be read not less than twice before they are brought back, while some of the other popular books would be read a dozen times, and some of the agricultural books that are more popular are read more frequently.

We try to anticipate even in our purchasing what our patrons want, so that early in the spring we send out a request to every organization that is patronizing us that they send in early, even before they ask for their library, a statement of the work that they expect to do the coming year, the special subjects, if any, that they expect to study. This gives us the opportunity. The women's clubs of course send their calendars and specify just what they will need. I think that the success of

our system is due very largely to the fact that we have been able in large measure to meet these demands. For the entire circulating library we have \$9,000 annually. We had demonstrated the utility of the system before asking for an appropriation. We had sent out over 225 traveling libraries before we had any appropriation, using the books of the State library.

The convention adjourned until 8 o'clock p. m.

EVENING SESSION, THURSDAY, OCTOBER 24, 1907.

The convention met at 8 p. m., the president, E. A. Burnett, in the chair. A. C. True, U. S. Department of Agriculture, presented the following paper:

THE ANNUAL REPORT OF THE INSTITUTE DIRECTOR.

The institute director's report twenty years ago was usually an extremely simple document. The institute work was in its infancy. Few directors had any very clear conception of its mission, and the public had not yet come to appreciate its value. It has now developed into an organization employing a large number of capable teachers meeting and instructing each year about a million and a half of farming people. Large sums of money are annually appropriated by the States for institute expenses, and they are rapidly awakening farmers to a better understanding of their occupation and are also interesting city and town people in rural life. The work is expanding as additional money is secured for its support, and the grade of teaching has been materially advanced.

The reports, therefore, of the operation and progress of this work ought not only to keep pace with the improvement which is being made, but also be in advance, leading and suggesting new and better methods, and stimulating to increased effort for rural improvement.

CHARACTER OF THE REPORT.

If the report is to maintain itself as an influential part of the institute work, it is manifest that it can not be a copy of that of ten or twenty years ago. Many papers and discussions that were of interest at the earlier period are unsuited to the agricultural people of to-day. The agricultural colleges, the experiment stations, the State departments of agriculture, and the farmers' institutes have advanced agricultural teaching, and are rapidly changing farming from a routine occupation to a technical pursuit. A report, therefore, that does not recognize this advance and adapt itself to the new conditions is of little interest or use to the modern farmer.

ROUTINE DATA IN THE REPORT.

What may be called the routine data in the report will naturally include a copy of the laws and regulations governing the institutes so that all may be informed as to what is expected of those who are engaged in institute work. There should be given also a complete list of the institutes held in the State during the year, together with the places and dates; a list of all of the county institute managers, with their post-office addresses; and a list of the speakers who are employed by the State, as well as of all local people who read papers or delivered addresses, together with the titles of the topics which each discussed. At some place in the director's report there should be given the attendance for each county and for each session of every institute held in the county. The attendance is the local manager's thermometer, showing the interest of the community in the work, a record of which is also serviceable in enabling other counties and communities to see what is occurring elsewhere. By means of these data it may be shown to legislators that the money appropriated for institute purposes has not been wasted, and they be induced at least to continue, if not increase, the appropriation for this purpose.

Along with the statement of the attendance should be given the cost of the institutes to the State, showing the amount expended for each individual in attendance. It will usually be found that an attendance fee of less than one cent per capita would pay the entire expense.

Almost, if not all, of the "routine data" enumerated can be printed in tabular form and placed in an appendix. They are for reference, and if properly arranged may be put in compact form, with small type, and occupy relatively little space.

THE BODY OF THE REPORT.

The body of the report, however, should be composed of papers and addresses presented at the various sessions, accompanied by an abstract of the discussions that they elicit. The papers and addresses for publication should be carefully selected and edited, and none but the best be admitted to the report. Abstracts giving the cream of other papers not suitable for publication entire can often be used with profit.

An item of great interest and value in a report is a list of queries found in the question box, with short answers appended to each query. A question often brings out more valuable truth than a long paper. Pointed queries and terse replies hold attention, are convincing, and give variety.

All this matter should be carefully edited and reduced to the lowest terms consistent with clearness and interest.

DISCUSSION BY THE DIRECTOR.

There should then be a presentation and careful discussion by the director of the operations and results of the year's work, stating what has been accomplished and suggesting plans for improvement. This discussion should treat, in a broad way, of the relation of the institute to the entire field of rural activity, outlining as clearly as possible the directions along which the work should be prosecuted in order to secure the best results.

This portion of the director's report should not be a mere catalogue or perfunctory statement of events, but should be a most carefully prepared and thoughtful contribution to the sum of knowledge, containing definite suggestions for the development of agricultural people through education and the improvement of those conditions which are peculiar to rural life.

The report should be clearly printed on good paper, with good-sized type, be appropriately illustrated, well indexed, and be strongly and neatly bound.

METHODS FOR SECURING FACTS FOR THE REPORT.

For securing data the director must depend chiefly upon his local managers and his State lecturers. Blank forms should be provided giving suggestions of items upon which information is desired, and be furnished to each State lecturer and local manager.

In order to insure that these forms shall be filled out and sent in promptly, the salary of the lecturer and the grant to the local manager for expenses should be conditional on the making of this report. If this is insisted upon, the director will have in hand as soon as the institute season closes all of the data needed for the preparation of his annual report. A single delinquent can delay the general State report for months and greatly embarrass the director and increase his labor.

Where no grants are made to the local managers and it is found that any are habitually negligent in the preparation and transmission of their reports, they should be promptly dismissed and others selected in their place.

PROMPTNESS IN ISSUING THE REPORT.

The publication of the report as soon as possible after the institute season is over is of the greatest importance. It should go into the hands of the people before the next institute season begins if it is to be of service in improving the work. So long as the data are locked up in the printing office or in the director's desk they are of no value to the public, for whose information they have been gathered.

ITEMS TO BE EXCLUDED.

The institute report is an educational document and not the record of a debating club, a convention, or a social gathering. There are therefore a number of items that a report should not contain, and perhaps these are as important to be noted as those that are to be included. Among these are:

(1) *Errors.*—All papers giving unreliable or misleading information should be excluded, no matter what the reputation of the writer, his social standing, or political influence. The report should convey truth as it is believed to exist and not false theories or incorrect deductions from scientific facts. Exaggeration is specially to be excluded, for a single exaggeration will often discredit an otherwise valuable paper.

Great care should therefore be exercised by the director in admitting matter that is to go into his report. He must always act upon the assumption that an exaggeration

or an error of fact will be discovered by some one and will in time appear to the discredit of his entire work. In his editorial capacity he should be held to reasonable responsibility for the accuracy of the matter contained in the report.

(2) *Irrelevant matter*.—Shut out mercilessly long essays and tedious papers that ramble over a subject and arrive at no conclusion. Exclude recitations by school children. The general agricultural public is not interested in having printed in a public document of the dignity of a State report the selections of school children which are taken from books already accessible to those who read. Exclude from the report all popular lectures upon topics not related to the business of agriculture. Popular lectures and rag-time music do not belong in records of institute work.

(3) *Criticisms*.—Do not admit any paper that criticises the local, State, or General Government, or public officials. The newspapers are the proper media for such discussions. The director can not afford to issue a State publication for the purpose of decrying the Government or its officers, whether of his own or of opposite political belief. Do not print any paper that criticises or is disrespectful to the director or his corps of assistants. All such criticisms should come as personal communications and ought not to be a part of the public records.

Cut out all partisan and sectarian papers and discussions. They engender strife upon topics which to many are sacred and beget bitterness to the injury of the work for which the institutes are organized.

CONCLUSION.

The director in the preparation of his report, if he hopes to avoid errors, succeed in editing a volume that will interest and instruct those who read it, and maintain the dignity of the department intrusted to his care, must give it his personal supervision and inspect closely every item and article of which it is composed.

A report made up of interesting, instructive, and suggestive matter relating directly to practical agriculture and the improvement of the conditions of rural life, carefully edited, neatly bound, promptly issued, and widely distributed, will be worthy of the educational work which it represents and will furnish an appropriate rounding out of the operations of the institute year. It will also be a permanent record of a year's progress in a great educational movement.

DISCUSSION BY G. A. PUTNAM, ONTARIO.

The annual report of any institution or society which has for its object the betterment of agricultural conditions, is of greater importance than those who are responsible for such publications usually realize. It may be that we who have to arrange for meetings, and keep more or less life in the work throughout a large territory, can not give due attention to the quality of the articles printed in our reports.

The marked advance made by agricultural journals during the past few years, and the wider circulation which they enjoy, render it unnecessary probably for the annual report of the institute to cover such a wide field as formerly. There is just a possibility that the great volume and lack of system which characterize the information appearing in our agricultural papers and reports make the material of less real value to the farmer than would be the case were less published, but put in a more systematic form, so that it could be used as a ready reference.

It becomes us as institute superintendents and workers to ask ourselves the question whether or not the time has arrived when our annuals should consist of somewhat exhaustive treatises upon the two or three subjects which we undertake to deal with in the report, rather than to give a smattering of nearly every branch in which agriculturists in various parts of the States or Provinces might be interested. In publishing an annual report, which is so widely distributed as most of these publications are, more time should be devoted to the preparation of the same than can well be given to it by the average superintendent. In securing the information to be used in compiling a report, the views and statements of facts from successful practical men should be utilized as far as possible and this supplemented by underlying principles and scientific facts interwoven, so far as the same can be applied or used in explanation. Too much attention can not be given to sifting material and putting it in a most readable form. The necessity for accuracy is patent to all of us.

It is to be regretted that, generally speaking, there is such delay in getting the material used in the reports in the hands of the readers. The articles have thus lost their freshness, and therefore to some extent their influence, before they have been generally distributed. The agricultural press, and we might include many of our weekly newspapers, have wide-awake agricultural editors, and they are in a position to place material in the hands of their readers when it is of greatest value. The day is fast coming when the different sections of the North American Continent will be devoted to only those lines of agriculture which are found best adapted to the soil, the climatic conditions, and the tastes of the people. This makes it all the more important that special reports bearing only upon the lines upon which they are interested, and dealing exhaustively with the same, should be put in the hands of the specialists, and the great majority of our farmers will in a few years be specialists.

The dairyman, who is devoting most of his energies to that industry, but following some other branch as a "side-line," say poultry production or fruit growing, does not care to read articles on the breeding, management, and care of horses, or the production of beef cattle. Neither does the man who is devoting his attention to the two latter branches care to receive reports dealing largely with bacon production, dairying, or fruit growing. Then the fruit man, generally speaking, does not appreciate articles upon any line of stock raising. He wants to devote all his time and attention to fruit growing. The up-to-date dairyman, or the up-to-date horse breeder, takes periodicals dealing with his specialty; and to give him a general report which has short articles upon a great variety of subjects will not be nearly so much appreciated as a somewhat exhaustive report dealing with his specialty. True, there probably would not be a report of particular interest to the specialist issued more than once in two or three years. Even so, he would be the gainer.

The great trouble in institute work is to enlist the cooperation and support of the large body of farmers who have not as yet taken any interest in the work. In nearly all sections of Ontario, which is covered thoroughly by the institute system, there are a few farmers, and sometimes good farmers too, who have not as yet taken an interest in the work. It must be admitted, however, that the great majority of those who have not united forces with the institute are men who are not making a success of their operations; and by these men, many of whom take little or no agricultural literature, a report dealing in a general way with many topics would no doubt be appreciated. Would it not be well for the farmers who now attend the institute and value the work thereof to make a special campaign to induce all the farmers of the locality to join with them, not only in attending and taking part in the discussions at the one or two institute meetings held in the year, but also to form local clubs for the study of those branches of agriculture which are of particular interest to them, or which could likely be introduced with profit in the locality? However, I am probably intruding upon ground which more properly belongs to some of the other subjects taken up and I shall conclude by appealing to all institute superintendents to consider well the quality of their reports. The day has come when these annuals must be gotten up in a most attractive form and contain material of real value else they will find their way into the waste paper basket.

The subject was further discussed by W. L. Amoss, of Maryland; E. A. Burnett, of Nebraska; George McKerrow, of Wisconsin; Mrs. Mary E. Lee, of Ohio; N. B. Critchfield, of Pennsylvania; L. R. Taft, of Michigan; A. L. Martin, of Pennsylvania; A. E. Chamberlain, of South Dakota, and T. L. Calvert and C. B. Galbreath, of Ohio.

J. Lewis Ellsworth, of Massachusetts, presented the following paper:

THE FIELD INSTITUTE.

When the farmers' institute work was first established, with government aid and support, there were comparatively few trained speakers on agricultural topics available for the work. The first speakers for these meetings were in the main practical farmers, who gave their own experiences and the lessons which they had drawn from them. With the establishment and development of the agricultural experiment stations throughout the country, and the coincident broadening and strengthening of the work of the agricultural colleges, there began to be a considerable number of trained men available for the institute work. With the advent of these speakers into the field a change of methods also began to be apparent. There was less of the discursive and unmethodic about their addresses than about those of the speakers who had preceded them. Trained in the logic of thinking, these speakers were more systematic in their methods of presentation. They also began to introduce the object method of illustration, by chart, blackboard, and specimen, into their talks. Here we have the germ of the field meeting, of demonstration work, and given this as a starting point its further development and application were logical and inevitable.

Like most movements of value to the world's progress, the field meeting did not spring fully developed into being from the brain of any one individual, but has been of slow growth, this one adding a little to his illustrations here and that one perfecting his methods in another direction, all the time gradually preparing the agricultural population for the fuller and more systematic work which has been a recent development in many sections. It may be that if it had been proposed thirty years ago that the audience go out into the fields for its institute, or have the various processes of agriculture demonstrated to it by actual example, it would have been an instant success. It is my opinion, however, that the audiences of that day were not ready for this sort of work, that the gradual education of the agricultural population was a necessary element to the success of the field or demonstration meeting. At the present time there is a demand for this sort of work, audiences are eager for it, and can not seem to get enough of it to satisfy them. There may often be a question as to the value of the popular craze of the moment in agricultural matters and in agricultural education as in the other branches of human interest and endeavor. It is not always the popular thing which is of lasting interest or value. In most communities comic opera and musical comedy outdraw any production of Shakespeare's masterpieces, and vaudeville is a better attraction than any star lecture course yet organized.

Let us therefore consider the field meeting with some care and see whether it is worthy of the attention now being bestowed upon it, whether it is likely to take a lasting place in the machinery of agricultural education. We must admit, I think, that a portion of the popularity of field and demonstration work is due to its novelty. The Athenians were not alone in always seeking after some new thing, and the call for change and novelty has nowhere or at no time been greater than in these United States in this first decade of the twentieth century. Must we not therefore ask ourselves whether this work has a value beside that of the drawing card, if we are to arrive at a full understanding of it and its possibilities of benefit to agriculture?

What therefore is the true value of the field meeting; wherein does it reach the minds of those in attendance to a greater degree than the ordinary institute lecture? If we answer this question it seems to me that we set at rest at once any doubt as to the value of these meetings. It is just on this question of the greater impression upon the minds of those in the audience that these meetings appeal to me as stronger and more helpful than the ordinary institute. We learn through all our five senses to be sure, but the two that are most useful to us in comprehending the experience of others are hearing and sight. The eye and the ear are the two organs through which we learn most of the things that are without our own experience and within that of the investigator and thinker. These two must work together to give a proper understanding of the unknown or little understood. The ear carries a concept to the brain, an understanding of what the lecturer has to say, but it is after all only our understanding of his understanding of the subject. When the eye joins with the ear, when we not only hear him describe his processes, but see him go through them, a truer and more lasting impression is obtained—indeed I doubt if a true impression can be reached in any other way.

It is in this way that the field or demonstration meeting is of value. The eye fixes and drives home to the brain the lesson which the demonstrator or lecturer wishes to convey, and the listener takes away with him something which he will remember and think about in the future.

Most of our dairymen, in Massachusetts, are particularly anxious to grow as much clover as possible, and experiments at the Massachusetts Agricultural Experiment Station have shown them how it may be done. The station has published bulletins on the subject, our board has printed the conclusions reached more than once, and yet I doubt if as much was done to impress this on our farmers by all this literature, as was done at our first field meeting at the college, at Amherst, in 1904, when Prof. William P. Brooks took those present over the section of the station farm devoted to the experiments in grass culture and showed them the various plats, explaining the processes by which the results were reached.

Poultry papers and poultry books have explained time and again how poultry should be prepared for market, all the expert poultrymen fully understand it, but there are farmers to-day in our State whose first understanding of these processes was gained at our demonstration meetings. They saw the thing done, and what had seemed to them, in their reading, a mysterious and difficult performance, became at once simplified to a question of mere manual practice and dexterity. So it is with many other of the less fully understood processes of agriculture, with grafting and budding, the selection of cattle for the dairy by their external signs and markings, all are made clear and simple by the doing of them in sight of the audience.

That this sort of work helps the lecturer to make his meaning clear is also a certainty. Occasionally men give false impressions in regard to the things of which they speak, not of intention, but because of faulty choice of language, whereby a turn is given to the minds of the listeners entirely unintended and unsuspected by the lecturer. If, while he told what should be done, he were to do it before the audience, all these ambiguous terms, all these little misunderstandings, would be cleared away, and speakers and audience would carry away the same clear concept of the subject under discussion.

Again, the doing of these things before the audience rends the veil of mystery which in many cases, intentionally or unintentionally, has been thrown around really simple processes, and they stand out in the mind of the listener, the onlooker, in their true perspective, not as dark mysteries to be practiced by the few, but as common performances, easily within the reach of any who care to take them up and perfect them.

Granted, as I think it must be, that the impression upon the brain is firmer and more lasting, where made at the field or demonstration meeting, than that secured from the ordinary spoken lecture or the written page, and our question as to the value of these meetings is answered. They are not merely the thing of the hour, they are of permanent and lasting value, and have come to stay. What is needed in agricultural education is that which will break the crust of conservatism in which so many of our farmers are enveloped, that which will pierce through the armor of habit and usage, and bring them to the proper use of their resources, their brains, and their hands. The field meeting is a help to that end, it is a mighty force, where rightly handled, and it is for you, gentlemen, to say whether it shall accomplish the work for which it is so obviously designed.

Having settled, to our own satisfaction at least, the value of the field institute, we are brought face to face with the question of how it should be organized and carried on so as to secure the maximum of benefit. In so far as the actual organization of one of these meetings is concerned the best results will be obtained, in my judgment, by making use of the regular organization for holding other institutes. In Massachusetts we have attained good results by holding what we have called field meetings of the State board of agriculture. We have invited the agricultural societies, granges, farmers' clubs, and other agricultural organizations to meet with us, and have tried to give as wide a scope to the meetings as possible. By getting these organizations interested we have been able to spread the notice of these meetings more effectively than through the ordinary channels. There have been no actual meetings of any of these organizations, so far as I know—except occasionally a meeting of the board of agriculture on the evening before the field meeting, when there was business on other subjects that required its consideration—but the object has been to make the farmers feel that the meeting was their meeting, so far as that might be brought about. A general invitation has of course been extended to all those interested in agriculture, and we have tried to make the farmers who were unconnected with any fraternal or other organization feel that they also had a proprietary interest in the meeting. Our organization has been the board of agriculture, cooperating with the other agricultural organizations of the Commonwealth. We have simply taken the conditions as we found them, and used the organization which lay ready to our hand. Other States, having other forms of organization, can adapt their plan to meet their conditions. I see no reason why any form of institute organization among the many

that exist in the different States would not lend itself readily to the conduct of such meetings.

When it comes to the actual carrying on of such a meeting, the arranging of the programme and its carrying out, we must again adapt ourselves to local conditions. Our interests in Massachusetts are so diversified, there are so many different varieties of farmer to which we must cater, that we have found that demonstration work, with a number of different lines treated at the same meeting, has best met our conditions. At our first field meeting, on the grounds of the Massachusetts Agricultural College, this was combined with inspection of the crops, animals, and experiments on the college and station grounds. Here, with the professors and station workers at hand to explain the conditions, and the results aimed at, this inspection was found to be of much value. We have confined our work at our later meetings to the demonstration of the various lines of agriculture not commonly properly understood by our farmers.

Among the subjects which we have demonstrated are the preparation and application of Bordeaux mixture, the preparation and application of the lime, salt, and sulphur wash, the Babcock test, the separation of cream with various makes of separators, fumigation in nurseries and orchards with hydrocyanic acid gas, the packing of fruit for the market, with various styles of packages shown, the killing and preparation of fowls for market, the selection of cattle for the dairy, the sanitary production of milk, the packing of apples for the market, the type of horse best adapted for breeding in New England, selection of horses for soundness, and feeding, both when working and when idle, budding and grafting, and the proper methods of setting, planting, and caring for market-garden crops. These demonstrations, you will see, cover a wide range of subjects and there are many others equally susceptible of demonstration. I doubt if we shall ever cover all the lines that lend themselves to this sort of work, and we certainly shall not do so for many years to come.

Time forbids that I should go into the details of these demonstrations, and I doubt if I could convey a clear idea of them to your minds even though I had hours at my disposal. Here again we see the futility of speech without example; for a complete understanding it would be necessary to demonstrate the demonstrations. They have all been conducted by acknowledged experts in the matters under consideration and have been successful beyond our expectations in most cases. In fact it seems to be established that if you select as demonstrator a man who has an expert knowledge of the subject he will work out a satisfactory physical demonstration, which will bring a better and fuller understanding even to those who have given some study to the subject, and this in spite of any apparent difficulties in the way of a satisfactory demonstration. If you wish anything demonstrated do not be discouraged because you can not see how it is to be done. Select an expert, give him a free hand, and he will find a way.

We have usually allowed from half to three-fourths of an hour for each demonstration and have had four at each meeting. With the delays in starting and the inevitable overrunning of time by some speakers this gives a full day's instruction, especially if followed or interrupted by a dinner. We have found the social element of the dinner a great help in stimulating and sustaining the interest of those in attendance. The meeting should be run off with snap and not allowed to drag between numbers. I have found it necessary on some occasions to limit demonstrators as to time, and to hurry them on to other branches of their subject, so as to bring them to a prompt conclusion. Snap, energy, an air of hustle, adds to any meeting, and it is more easily maintained with these meetings than with others.

As for advertising, we have followed the usual lines, with postal-card notice and large posters in post-offices and other public places, and have endeavored to supplement this with other methods of reaching the public. Beside our general invitation to the granges, farmers' clubs, etc., we have sent out special letters to the secretaries of these organizations, with the request that they be read in the meetings, giving an account of what is to be done a little more fully than the posters can show it. We have also sent out press stories in advance of the meetings to all the papers of the State or to the greater part of them. We have always found that the press were very glad to get these items and have given as much prominence to them as we could reasonably expect.

To my mind the future of the field meeting is assured. I look to see it become a leading feature of the institute work in every part of the United States and Canada, and further, I look to see the same principles applied, so far as possible, at the indoor winter meetings. There are a great many object lessons that can be shown as well in the winter months as in the open-air meetings of the summer, and with the wider spread of the field meeting and its physical demonstration work I look to see the farmers demand the same thing for their winter meetings. I would urge all those having charge of

farmers' institutes to give this question careful consideration. Do not be deterred by any fancied difficulties in the way of holding field meetings. Begin to plan for them and you will be surprised to see how easily these difficulties resolve themselves as you approach them. Give the field institute a trial, if you have not already done so, and I am sure that you will go on and develop this line of work to the full limits of its possibilities.

DISCUSSION BY F. E. DAWLEY, OF NEW YORK.

In New York State we have held a number of field institutes with varying success. The principal requisites for holding a satisfactory field institute are: First, a farm, dairy barn, orchard, potato field, or milk or butter factory where the best of work is being done along practical lines; second, two distinct classes of speakers—one a scientific man who can lay down the principles that underlie certain lines of work which are being carried on at the place visited, and the other a practical man who can demonstrate these principles as being worked out on the place (occasionally we find one man who combines these two requisites); third, a community of farmers who are interested in getting the best practical results in carrying out the principles outlined. In my opinion we have been most successful in this line of work in the dairy, fruit growing, and potato sections.

In handling one of these meetings in a potato section we find some man who is willing to leave a portion of his potato field unsprayed. This is staked early in the season and at the time when blight first makes its appearance we advertise an institute, demonstrating with spraying machinery what has already been done and showing the effect on the growing crop. At that time the scientific principles in relation to spraying are expounded and a practical demonstration made. When the potatoes in this field are ready to be dug we announce another session of the institute and the farmers are asked to come and see the results. It is not necessary to detail to men who are actively engaged in institute work, as are the members of the American Association of Institute Workers, the manner in which these institutes are received by the people. In most instances the crop speaks for itself, and by appointing committees to measure sections of various rows and weigh or measure the crop we secure a remarkable local interest.

In dairy barns we follow much the same plan, beginning with the scientific side of feeding, following through manure saving, ventilation, and care of animals, and then have a practical man show the labor-saving devices, the value of the cement floor and gutter in keeping the stable clean and saving the manure, and how the care of the animals helps in getting a clean, pure product. In some instances plates have been exposed to show how a little dust or a fly can increase the bacterial count in milk. Experiments have also been made before the audiences showing the advantages which come from complete cooling and aeration. While this line of work is not so easily demonstrated as the potato work, the results have been very satisfactory.

In connection with the State experiment station, we have held meetings in experimental orchards where sod and clean culture is being tried side by side, where spraying is being done for scale and scab and codling moth, and where dwarf trees have been planted to show the results as compared with the standard sorts.

On the whole the results coming from this line of work are very encouraging, and we are extending it each year as suitable places for holding the meetings can be found.

T. G. RAYNOR, of Ontario. We have had some experience in holding these field meetings in the Province of Ontario, and I look upon them if they are carried out in the proper way as being a great educational feature. You perhaps know that in the Province we care a great deal about seed. We aim to place before the farmers the advisability of producing good clean seed, and the summer and fall meetings were partly organized with a view of giving information which would lead to the production of clean and pure seed measuring up to the certain standard of purity required by law in the Province.

In some localities where the school teachers were interested the children came and they received instruction in this way. I am heartily in sympathy with this movement, and I hope it will be taken up more generally through the institutes throughout the country.

C. A. McNabb, of Oklahoma, presented the following paper:

MONTHLY MEETINGS.

We held a series of monthly institutes in four counties in Oklahoma during the busy months of the past summer. The prime object was to work out, if possible, a plan which would enable the farmers of any community through the aid of the institute superintendent to hold monthly meetings of their institute without the presence or aid of institute lecturers, or at least require the presence of but one such leader. The counties in which the meetings were held had enjoyed a fairly good working institute organization for three years. The months in which the meetings were held were May, June, July, and August, or at a time when the farmers were extremely busy with their crops.

The plan of operation, briefly stated, was as follows:

Each meeting occupied but one day in each month. The meetings were held at various points throughout the county, i. e., at each meeting the place of the next meeting of the institute was set for some other point in the county. There was but one subject considered at each meeting and such subject separated into about eight subdivisions and a speaker was selected for each subdivision. In the main each speaker was chosen because of some practical experience he may have had in that connection on the farm. A positive promise was procured from each proposed speaker that he would prepare a paper upon his subdivision of the subject that would occupy 15 to 20 minutes in its reading. The programmes were prepared in my office and the various phases of each subdivision were briefly outlined in such manner as would furnish the greatest aid to the speaker in the preparation of his paper. In addition to this each speaker was supplied with bulletins procured from the Department or from State experiment stations touching upon the subject in hand, and mailed to him two or three weeks in advance of the date of meeting. Care was taken that particular reference was made to that part of the bulletin relating to the branch of the subject each speaker was to cover, thus requiring him to read the entire bulletin in order to get the information he was seeking. * * *

After all the papers were read the subject as a whole was taken up for general discussion and, contrary to the usual experience, there were present in each audience a number of farmers whose recent reading of bulletins covering the subject had so prepared them that the discussions were quite complete and very interesting. In fact, it was a frequent occurrence for a farmer to read an extract from a bulletin in support of his argument. These meetings brought out many interesting papers—in fact, papers of rare value coming as they did from the "grass roots." In some instances where an individual had an especially good paper, he was urged to attend meetings in adjoining counties where his paper would again be presented. At the close of the meetings the best papers were collected and later copies were furnished to the leading agricultural journals of the State for publication. This one feature alone serves a double purpose in that it encourages the individual to further effort and enables the institute superintendent to locate through the State the best available institute "timber."

The great yet comparatively hidden value of meetings conducted along this plan lies in the compulsory reading of the bulletins supplied, which if persisted in for some months without interruption opens up an avenue for development along that line that is not otherwise fully utilized.

Notwithstanding the fact that the meetings in these particular instances were held in communities which heretofore never had a meeting of like character, yet the attendance was phenomenal. As a rule, the speakers chosen were from the immediate community in which the meeting was held, and at its close the subject for the following meeting was announced, the place of holding decided upon, and as far as possible the speakers were chosen. The average attendance at these series of meetings (which were 16 in number and held at different points in 4 different counties during the very busiest time on the farm) was 82. The highest attendance at any one meeting was 135.

The meetings were not discontinued because of lack of interest, for in each instance the farmers were quite anxious that they be continued. In no meeting was there anyone upon the programme but actual farmers except myself, and I appeared only because I had to be present, and in each case I confined my remarks entirely to that subdivision of the main subject to which I was assigned on the programme.

In some instances farmers who were inexperienced in addressing meetings were assigned a place on the programme, but later became frightened to the extent that they begged to be excused. A few words of encouragement from me, together with a suggestion of personal help, served to keep them in line. Others would go so far as to prepare their paper and then beg to be excused from reading it. In no instance would we listen to such a proposition, however, and after the necessary persuading influences were brought to bear, before they realized what they were about they were on their feet reading their paper or entering into the discussions.

My conclusions in the matter are that this plan, with slight modifications to meet the circumstances existing in different localities, offers a solution of the vexing problem confronting each State institute department, viz., that of procuring ready, reliable institute help in all agricultural communities, so that efficient institutes may be held with greater frequency and be inspirational and progressive in promoting a better agriculture and a better intellectual life.

DISCUSSION BY ANDREW S. ELLIOTT, CANADA.

In my judgment, the weakest link in the institute chain is that which connects the State department with the man on the farm. Owing to the wide field to be covered and the limited means at our disposal, we can not follow up our work to obtain satisfactory results. It is too much a system of sowing the seed and allowing it to die for lack of subsequent care and attention. A meeting is held in a district, some new thought of vital interest is thrown out by the delegate, which, if followed by more information, would result in great good, but at that one meeting the idea is only imperfectly elaborated and the effect soon passes away. On the other hand, if the subject were taken up by the county and local meetings and discussed the result might be wonderfully different.

Outside of our own experience, we have three sources from whence to draw our knowledge: (1) The institute meeting, with the benefit of personal contact; (2) the personal presence and the magnetic voice, factors that in this era of books are too often neglected, hence the decadence of oratory and the scarcity of men who, by their presence and eloquence, can mold the opinions of their hearers at will; and (3) various reports and bulletins issued by the agricultural departments. The value of these following the institute lecturer can not be estimated. The thought put forth at the institute meeting is here explained and made workable, and to get these publications into the hands of every farmer who will use them is the work of the organization. Then, the farmer learns by watching what others in like circumstances are doing.

An efficient county organization will at once bring farmer and department together. Select the most desirable places in which to hold meetings, arrange the programme with due regard to existing conditions and see that advertising is well done, take care of the delegates and explain to them the peculiar needs of the district, and, above all, see that every member receives the publications issued by the department. I can conceive of no other system that will accomplish this equally well. Various schemes have been tried, such as sending publications to post-offices to be distributed by the postmasters, with the result that they found their way to many who did not use them; tons of material also accumulated in post-offices, never being sent out at all. The voters' lists were also used for the purpose of getting names; Representatives also sent publications to their constituents. When once a man is placed on the mailing list it remains indefinitely; parties may die or remove out of bounds, and still publications are sent on, but with the county organization it is different. Annually the mailing list is revised, and only the names of those who are members are sent down, it being rightly judged that a man who has so little interest in his business that he will not pay the small fee that is necessary to membership in the county institute, and which will entitle him to have his name placed on the mailing list, will not use them if he obtains them free.

The county organization should have a president, secretary, and board of directors, and on the secretary more than on any of the others rests the responsibility of making his institute a success. He should be enthusiastic and a worker from start to finish, and he should receive a definite remuneration for his services, either a straight salary or commission on membership. The membership fee should not be large—just sufficient to meet the expenses of the institute. There should be a director in every township, and he might be secretary of the township organization and assist in obtaining members in his township. He must be a man not afraid to do work without hope of reward, arrange meetings, hunt up speakers to take part, and have a general oversight of his township. It might also be possible to have a society formed and doing good work in school sections. Every endeavor should be made to develop local men. An exchange of men is desirable from one society to another, or from one county to another, as a man will do much better work and be more acceptable some distance from home.

The women also should be enlisted in the work, and meetings might in many cases take the form of a social or a summer picnic to be held on the farm of some member, where examination of farm and stock could be part of the programme.

The annual meeting of the county institute could take this form on some farm that is centrally situated, and, when possible, have a delegate sent from the institute department to conduct the meeting. This meeting will bring farmers, their wives, sons, and daughters together. It will promote sociability and teach by object lessons new and better methods.

By county organizations and the holding of county and township meetings, in many cases only one delegate need be sent out, and much more and more efficient work could be done with the limited means at our disposal.

REPORT OF THE EXECUTIVE COMMITTEE.

The executive committee held but one formal meeting during the year. At this meeting, which occurred November 14, 1906, the following appointments of the standing committees of the association for the ensuing year were made:

Institute organization and methods: F. H. Rankin, Urbana, Ill., chairman; A. M. Soule, Blacksburg, Va.; James Murray, Regina, Canada.

Institute lecturers: W. C. Latta, Lafayette, Ind., chairman; George McKerrow, Madison, Wis.; T. L. Calvert, Columbus, Ohio.

Cooperation with other educational agencies: Kenyon L. Butterfield, Amherst, Mass., chairman; Hubert Vreeland, Lexington, Ky.; Tait Butler, Raleigh, N. C.

Movable schools of agriculture: G. C. Creelman, Guelph, Canada, chairman; A. L. Martin, Harrisburg, Pa.; F. E. Dawley, Fayetteville, N. Y.

Boys and girls' institutes: L. R. Taft, Agricultural College, Mich., chairman; H. T. French, Moscow, Idaho; J. W. Carson, College Station, Tex.

Women's institutes: Miss R. Blanche Maddock, Guelph, Ontario, chairman; Mrs. I. S. Raymond, Sidney, Ill.; Mrs. Helen Wells, Syracuse, N. Y.

The special committee on legislation was organized by the appointment of N. B. Critchfield, Harrisburg, Pa., chairman; L. R. Taft, Agricultural College, Mich.; and Fred H. Rankin, Urbana, Ill.

An invitation was received to meet with the Association of American Agricultural Colleges and Experiment Stations, June 27, at Lansing, Mich. Upon consultation by letter, the committee were of opinion that this date is too early in the season to enable the institute directors to make up their reports, and, therefore, declined the invitation. Subsequently, October 23–24, 1907, was fixed upon as the time for the next meeting, and Washington, D. C., was selected as the place.

Four thousand notices of the time and place of the meeting were printed and distributed.

The programme for the Washington meeting was prepared early in the year, and 2,000 were printed and supplied to the State and provincial directors, the list of lecturers, and to about 500 leading agricultural newspapers.

Five thousand copies of the report of the proceedings of the Baton Rouge meeting were printed by the United States Department of Agriculture and were distributed among the institute workers of the United States and Canada.

The treasurer's report shows that 38 States and Provinces contributed their annual dues of \$5 for the year 1906, a gratifying evidence of growing interest in the purposes and work of the association.

Respectfully submitted.

E. A. BURNETT,
C. A. CARY,
F. H. HALL,
FRANKLIN DYE,
G. A. PUTNAM,
JOHN HAMILTON,
Committee.

REPORT OF SPECIAL COMMITTEE ON NATIONAL LEGISLATION.

The committee on national legislation appointed at the last meeting of this association respectfully reports that the chairman appeared before the Senate Committee of Congress on Agriculture in behalf of the reinstatement in the appropriation bill of the Department of Agriculture of the sum of \$15,000 requested by the Secretary of Agriculture for the support of farmers' institutes and agricultural education work additional to the present appropriation of \$5,000. This amount had been stricken out of the bill by the House of Representatives upon the recommendation of its agricultural committee.

The statement by the chairman of your committee was accompanied by a memorial signed by the committee, consisting of recommendations by the Secretary of Agriculture; resolutions by the Farmers' National Congress; the American Association of Farmers' Institute Workers; the Association of American Agricultural Colleges and Experiment Stations; the Graduate School of Agriculture; the National Grange—Order of Patrons of Husbandry; the Department of Superintendence of the National Educational Association; and extracts from the annual message of the President of the United States.

The Senate committee gave full opportunity to the chairman of your committee to be heard, and printed his argument and the memorial in full in its proceedings, and reinstated the amount requested in the bill, which was subsequently passed by the Senate as amended. The House, however, refused to concur in the amendment, and it was afterwards stricken out by the conference committee. * * *

It is believed that a proper presentation of the importance and needs of this work by those who are directly interested will now secure a favorable report by the Agricultural committee and the subsequent passage of an adequate appropriation by Congress.

Respectfully submitted.

N. B. CRITCHFIELD,
L. R. TAFT,
Committee.

REPORT OF TREASURER.

Account of John Hamilton, treasurer of the American Association of Farmers' Institute Workers, from November 1, 1906, to October 23, 1907.

DR.

To balance in hands of the treasurer, November 1, 1906.....	\$165.85
To receipts from 38 States and Provinces, annual dues.....	190.00
To receipts from individual membership dues.....	17.00
To interest on deposits.....	5.32

378.17

CR.

By postage paid.....	19.35
By amount paid for printing 2,000 copies programmes.....	24.00
By balance in the hands of the treasurer October 23, 1907.....	334.82

378.17

REPORT OF THE AUDITING COMMITTEE.

The undersigned committee appointed to audit the accounts of John Hamilton, treasurer of the American Association of Farmers' Institute Workers, report that they have examined the accounts and have compared his vouchers with the credits claimed and have found the same correct and the balance in his hands October 23, 1907, to be \$334.82.

(Signed) J. LEWIS ELLSWORTH,
 GEO. MCKERROW,
 Committee.

ELECTION OF OFFICERS.

The committee on nominations, consisting of L. R. Taft, A. L. Martin, and G. A. Putnam, presented the following nominations for officers, who were duly elected for the ensuing year: President, Tait Butler, of Raleigh, N. C.; vice-president, J. L. Ellsworth, of Boston, Mass.; secretary-treasurer, John Hamilton, of Washington, D. C.; members of the executive committee, G. A. Putnam, T. L. Calvert, and A. E. Chamberlain.

RESOLUTION REGARDING INCREASED SUPPORT FOR THE INSTITUTE WORK OF THE U. S. DEPARTMENT OF AGRICULTURE.

The committee on resolutions, consisting of G. C. Creelman, of Ontario, K. L. Butterfield, of Massachusetts, and T. L. Calvert, of Ohio, reported as follows:

Whereas we cordially indorse the work already done in forwarding the interests of farmers' institutes by the U. S. Department of Agriculture through the Farmers' Institute Specialist; and

Whereas we believe the time has come for a material increase in the resources available for this work, to the end that investigations, experiments, and other forms of assistance in respect to the rapidly developing possibilities of institute work may be vigorously prosecuted: Therefore be it

Resolved, That the executive committee of this association be requested to confer as soon as practicable with the Office of Experiment Stations and with the Secretary of Agriculture relative to the needs of this work; and that the committee be further authorized to use all legitimate means to urge upon the incoming Congress the appropriation of a sum sufficient to enable the Department to develop adequately this phase of the work of the Department.

RESOLUTION REGARDING ORGANIZATION FOR THE STUDY OF HOME ECONOMICS.

Mrs. I. S. Raymond, of Illinois, offered the following resolution:

Whereas experience has proved the value of organization for woman's work: Therefore be it

Resolved, That an organization for the study of home economics be formed in every Province, State, and Territory where one does not now exist, and that the same be affiliated with the farmers' institutes, and have for its object the furthering of the work of the institute in regard to the affairs of the home and the care and education of the children.

The resolution was referred to the standing committee on women's institutes for further consideration.

Resolutions of regret on the retirement of O. C. Gregg, of Minnesota, from institute work were adopted.

ADDITION TO BY-LAWS.

On motion the following addition to the by-laws was adopted:

The members of the standing committees shall be appointed one for one year, one for two years, and one for three years, and as their terms expire the subsequent appointments shall be for three years. The member whose term first expires shall be chairman of the committee.

The invitation of George McKerrow to hold the next meeting of the Association at Madison, Wis., was referred to the executive committee.

On motion the convention adjourned sine die.

**STATISTICS OF FARMERS' INSTITUTES IN THE SEVERAL STATES,
TERRITORIES, AND PROVINCES.**

State, Territory, or Province.	Regular institutes.			Round-up institutes.			Normal institutes.		
	Ses-sions.	Attend-ance.	Aver-age.	Ses-sions.	Attend-ance.	Aver-age.	Ses-sions.	Attend-ance.	Aver-age.
Alabama.....	33	2,857	87	18	2,700	150	.....	.....	.....
Alberta.....	244	12,200	50	8	2,500	312	.....	.....	.....
California.....	296	20,470	69	.....	.....	.....	.....	.....	.....
Colorado.....	171	16,960	99	.....	.....	.....	.....	.....	.....
Connecticut.....	22	1,650	75	.....	.....	.....	.....	.....	.....
Delaware.....	51	9,210	181	.....	.....	.....	.....	.....	.....
Indiana.....	996	177,441	178	4	700	175	5	150	30
Maine.....	65	4,771	73	.....	.....	.....	.....	.....	.....
Manitoba.....	52	3,140	60	3	560	187	.....	.....	.....
Massachusetts.....	155	19,688	127	.....	.....	.....	.....	.....	.....
Minnesota.....	282	67,063	241	.....	.....	.....	.....	.....	.....
Mississippi.....	224	22,798	110	8	970	121	.....	.....	.....
Montana.....	130	7,541	58	.....	.....	.....	.....	.....	.....
Nebraska.....	442	65,419	148	2	400	200	.....	.....	.....
New Mexico Territory.....	30	979	32	.....	.....	.....	.....	.....	.....
New York.....	834	105,196	126	.....	.....	.....	16	960	60
North Carolina.....	348	45,240	130	8	1,600	200	.....	.....	.....
Ohio.....	1,495	92,302	62	.....	.....	.....	.....	.....	.....
Oklahoma.....	99	6,715	68	7	1,300	186	.....	.....	.....
Ontario.....	5,007	180,926	36	.....	.....	.....	14	2,350	167
Pennsylvania.....	981	147,895	150	.....	.....	.....	7	1,400	200
Prince Edward Islands.....	250	5,000	20	3	1,500	500	.....	.....	.....
Saskatchewan.....	47	1,880	40	.....	.....	.....	7	200	28
South Dakota.....	280	26,000	90	.....	.....	.....	.....	.....	.....
Tennessee.....	51	10,400	204	9	7,500	800	.....	.....	.....
West Virginia.....	373	24,825	67	14	1,050	75	.....	.....	.....
Wisconsin.....	300	49,989	166	11	2,795	236	.....	.....	.....
Wyoming.....	35	1,292	34	.....	.....	.....	.....	.....	.....
Total.....	13,283	1,130,847	2,781	95	23,575	3,142	49	5,060	485

State, Territory, or Province.	Independent institutes.			Institute trains.			Picnics, harvest-home meetings, etc.		State lecturers.	Cost.
	Ses-sions.	Attend-ance.	Aver-age.	Days.	Stops	Attend- ance.	No.	Attend- ance.		
Alabama.....	.....	.....	.....	.....	.....	.....	9	\$600.00	.....	.....
Alberta.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	10,000.00
California.....	.....	.....	.....	.....	.....	.....	30	6,000.00	.....	.....
Colorado.....	.....	.....	.....	.....	.....	.....	26	5,003.19	.....	.....
Connecticut.....	.....	.....	.....	.....	.....	.....	4	2,800	18	400.00
Delaware.....	.....	.....	.....	.....	.....	.....	11	600.00	.....	.....
Florida.....	809	.....	.....	.....	.....	.....	4	7.00	.....	.....
Indiana.....	(a)	.....	.....	.....	.....	.....	25	12,000.00	.....	.....
Maine.....	7	.....	.....	.....	.....	.....	13	3,000.00	.....	.....
Manitoba.....	145	7,105	49	4	16	2,450	.....	.....	16	.....
Massachusetts.....	.....	.....	.....	.....	.....	.....	70	.....	.....	.....
Minnesota.....	.....	.....	.....	.....	.....	.....	10	18,170.00	.....	.....
Mississippi.....	.....	.....	.....	.....	.....	.....	9	2,700	21	3,000.00
Montana.....	.....	.....	.....	.....	.....	.....	21	4,000.00	.....	.....
Nebraska.....	.....	.....	.....	.....	.....	.....	22	8,684.04	.....	.....
New Mexico Territory.....	.....	.....	.....	.....	.....	.....	11	600.00	.....	.....
New York.....	75	32,600	434	.....	.....	.....	82	20,000.00	.....	.....
North Carolina.....	4	.....	.....	.....	.....	.....	25	4,500.00	.....	.....
Ohio.....	150	10,000	66	.....	.....	.....	40	19,882.77	.....	.....
Oklahoma.....	.....	.....	.....	.....	.....	.....	8	1,000.00	.....	.....
Ontario.....	.....	.....	.....	.....	.....	.....	112	43,550.00	.....	.....
Pennsylvania.....	24	3,000	125	.....	.....	.....	10	15,000	60	17,500.00
Prince Edward Islands.....	.....	.....	.....	.....	.....	.....	3	2,000	13	2,500.00
Saskatchewan.....	40	2,000	50	.....	.....	.....	.....	.....	21	3,500.00
South Dakota.....	1	100	100	.....	.....	.....	1,500	.....	13	4,999.94
Tennessee.....	9	780	80	.....	.....	.....	.....	.....	6	3,960.00
West Virginia.....	.....	.....	.....	.....	.....	.....	29	7,476.71	.....	.....
Wisconsin.....	.....	.....	.....	.....	.....	.....	23	12,000.00	.....	.....
Wyoming.....	.....	.....	.....	.....	.....	.....	13	695.55	.....	.....
Total.....	1,264	55,585	904	4	16	2,450	42	25,800	752	213,629.20

^a Included in sessions of regular institutes.

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